

## DEPARTMENT OF HEALTH AND HUMAN SERVICES

### Centers for Medicare & Medicaid Services

42 CFR Parts 403, 405, 410, 411, 414, 415, 423, 424, and 425

[CMS–1751–F]

RIN 0938–AU42

### Medicare Program; CY 2022 Payment Policies Under the Physician Fee Schedule and Other Changes to Part B Payment Policies; Medicare Shared Savings Program Requirements; Provider Enrollment Regulation Updates; and Provider and Supplier Prepayment and Post-Payment Medical Review Requirements

**AGENCY:** Centers for Medicare & Medicaid Services (CMS), Health and Human Services (HHS).

**ACTION:** Final rule.

**SUMMARY:** This major final rule addresses: Changes to the physician fee schedule (PFS); other changes to Medicare Part B payment policies to ensure that payment systems are updated to reflect changes in medical practice, relative value of services, and changes in the statute; Medicare Shared Savings Program requirements; updates to the Quality Payment Program; Medicare coverage of opioid use disorder services furnished by opioid treatment programs; updates to certain Medicare provider enrollment policies; requirements for prepayment and post-payment medical review activities; requirement for electronic prescribing for controlled substances for a covered Part D drug under a prescription drug plan, or a Medicare Advantage Prescription Drug (MA–PD) plan; updates to the Medicare Ground Ambulance Data Collection System; changes to the Medicare Diabetes Prevention Program (MDPP) expanded model; and amendments to the physician self-referral law regulations.

**DATES:** These regulations are effective on January 1, 2022.

**FOR FURTHER INFORMATION CONTACT:** *DivisionofPractitionerServices@cms.hhs.gov*, for any issues not identified below.

Michael Soracoe, (410) 786–6312, or *DivisionofPractitionerServices@cms.hhs.gov*, for issues related to practice expense, work RVUs, conversion factor, and PFS specialty-specific impacts.

Larry Chan, (410) 786–6864, for issues related to potentially misvalued services under the PFS.

Patrick Sartini, (410) 786–9252, and Larry Chan, (410) 786–6864, for issues related to telehealth services and other services involving communications technology.

Julie Adams, (410) 786–8932, for issues related to payment for anesthesia services.

Sarah Leipnik, (410) 786–3933, or *DivisionofPractitionerServices@cms.hhs.gov*, for issues related to split (or shared) services.

Michelle Cruse, (410) 786–7540, and Michael Konieczny, (410) 786–0825, for issues related to payment for vaccine administration services.

Regina Walker-Wren, (410) 786–9160, for issues related to billing for services of physician assistants and PFS payment for teaching physician services.

Pamela West, (410) 786–2302, for issues related to PFS payment for therapy services, medical nutrition therapy services, and services of registered dietitians and nutrition professionals.

Liane Grayson, (410) 786–6583, for issues related to coinsurance for certain colorectal cancer screening services and PFS payment for critical care services.

Lisa Parker, (410) 786–4949, and Michele Franklin, (410) 786–9226, for issues related to RHCs and FQHCs.

Laura Kennedy, (410) 786–3377, for issues related to drugs payable under Part B.

Heather Hostetler, (410) 786–4515, and Elizabeth Truong, 410–786–6005, for issues related to removal of selected national coverage determinations.

Sarah Fulton, (410) 786–2749, for issues related to Appropriate Use Criteria for Advanced Diagnostic Imaging (AUC); and Pulmonary Rehabilitation, Cardiac Rehabilitation and Intensive Cardiac Rehabilitation.

Rachel Katonak, (410) 786–8564, for issues related to Medical Nutrition Therapy.

Sabrina Ahmed, (410) 786–7499, for issues related to the Medicare Shared Savings Program (Shared Savings Program) quality reporting requirements and quality performance standard.

Janae James, (410) 786–0801, Elizabeth November, (410) 786–4518, or *SharedSavingsProgram@cms.hhs.gov*, for issues related to Shared Savings Program beneficiary assignment, repayment mechanism requirements, and benchmarking methodology.

Naseem Tarmohamed, (410) 786–0814, or *SharedSavingsProgram@cms.hhs.gov*, for inquiries related to Shared Savings Program application, compliance and beneficiary notification requirements.

Amy Gruber, *AmbulanceDataCollection@cms.hhs.gov*, for issues related to the Medicare Ground Ambulance Data Collection System.

Juliana Tionson, (410) 786–0342, for issues related to the Medicare Diabetes Prevention Program (MDPP).

Laura Ashbaugh, (410) 786–1113, for issues related to Clinical Laboratory Fee Schedule: Laboratory Specimen Collection and Travel Allowance and Use of Electronic Travel Logs.

Frank Whelan, (410) 786–1302, for issues related to Medicare provider enrollment regulation updates.

Katie Mucklow, (410) 786–0537, for issues related to provider and supplier prepayment and post-payment medical review requirements.

Lindsey Baldwin, (410) 786–1694, and Michele Franklin, (410) 786–9226, for issues related to Medicare coverage of opioid use disorder treatment services furnished by opioid treatment programs.

Lisa O. Wilson, (410) 786–8852, or Meredith Larson, (410) 786–7923, for inquiries related to the physician self-referral law.

Joella Roland, (410) 786–7638, for issues related to requirement for electronic prescribing for controlled substances for a covered Part D drug under a prescription drug plan or an MA–PD plan.

Kathleen Ott, (410) 786–4246, for issues related to open payments.

Molly MacHarris, (410) 786–4461, for inquiries related to Merit-based Incentive Payment System (MIPS).

Brittany LaCouture, (410) 786–0481, for inquiries related to Alternative Payment Models (APMs).

#### SUPPLEMENTARY INFORMATION:

*Addenda Available Only Through the Internet on the CMS Website:* The PFS Addenda along with other supporting documents and tables referenced in this final rule are available on the CMS website at <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/PhysicianFeeSched/index.html>. Click on the link on the left side of the screen titled, “PFS Federal Regulations Notices” for a chronological list of PFS **Federal Register** and other related documents. For the CY 2022 PFS final rule, refer to item CMS–1751–F. Readers with questions related to accessing any of the Addenda or other supporting documents referenced in this final rule and posted on the CMS website identified above should contact *DivisionofPractitionerServices@cms.hhs.gov*.

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We also seek to identify opportunities to collaborate with other Federal agencies, States, and the private sector to adopt standards and technology-driven solutions to address our quality measurement priorities across sectors.

#### (5) Solicitation of Comments

As noted previously, we solicited input on the future development of the following:

##### (a) Definition of Digital Quality Measures

We solicited feedback on the following as described in section IV.A.1.c. of this final rule:

- Do you have feedback on the dQM definition?
- Does this approach to defining and deploying dQMs to interface with FHIR-based APIs seem promising? We also welcome more specific comments on the attributes or functions to support such an approach of deploying dQMs.

##### (b) Use of FHIR for Current eQMs

We solicited feedback on the following as described in section IV.A.1.c. of this final rule:

- Do you agree that a transition to FHIR-based quality reporting can reduce burden on health IT vendors and providers? Please explain if you do not agree.
- Would access to near real-time quality measure scores benefit your practice? How so?
- What parts of the current CMS QRDA IGs cause the most burden (please explain the primary drivers of burden)?
- In what ways could a CMS FHIR Reporting IG be crafted to reduce burden on providers and vendors?

##### (c) Changes Under Consideration To Advance Digital Quality Measurement

Actions in Four Areas to Transition to Digital Quality Measures by 2025.

- We solicited feedback on the following as described in section IV.A.1.c. of this final rule:
  - ++ Do you agree with the goal of aligning data needed for quality measurement with interoperability requirements? What are the strengths and limitations of this approach? Are there specific FHIR Implementation Guides suggested for consideration?
  - ++ How important is a data standardization approach that also supports inclusion of PGHD and other currently non-standardized data?
  - ++ What are possible approaches for testing data quality and validity?
  - We solicited feedback on the following as described in section IV.A.1.c. of this final rule:

++ What functionalities, described in section (4)(b) or others, should quality measure tools ideally have in the context of the pending availability of standardized and interoperable data (for example, standardized EHR data available via FHIR-based APIs)?

++ How would this more open, agile strategy for end-to-end measure calculation facilitate broader engagement in quality measure development, the use of tools developed for measurement for local quality improvement, and/or the application of quality tools for related purposes such as public health or research?

• We solicited feedback on the following as described in section IV.A.1.c. of this final rule:

++ What are key policy considerations for aggregation of data from multiple sources being used to inform measurement?

++ What role can or should data aggregators play in CMS quality measure reporting in collaboration with providers? How can CMS best facilitate and enable aggregation?

• We solicited feedback on the following as described in section IV.A.1.c. of this final rule:

++ What are initial priority areas for the dQM portfolio given evolving interoperability requirements (for example, measurement areas, measure requirements, tools)?

++ We also seek to identify opportunities to collaborate with other Federal agencies, States, and the private sector to adopt standards and technology-driven solutions to address our quality measurement priorities and across sectors.

Commenters should consider provisions in the CMS Interoperability and Patient Access final rule (85 FR 25510), CMS CY 2021 PFS final rule (85 FR 84472), and the ONC 21st Century Cures Act final rule (85 FR 25642).

We plan to continue working with other agencies and stakeholders to coordinate and to inform any potential transition to dQMs by 2025. While we will not be responding to specific comments submitted in response to this Request for Information in the CY 2022 PFS final rule, we will actively consider all input as we develop future regulatory proposals or future subregulatory policy guidance. Any updates to specific program requirements related to quality measurement and reporting provisions may be addressed through separate and future notice-and-comment rulemaking, as necessary.

We thank commenters for the feedback received through this request for information. We may consider this

information to inform future rulemaking.

#### d. Closing the Health Equity Gap in CMS Clinician Quality Programs—Request for Information (RFI)

Persistent inequities in health care outcomes exist in the United States, including among Medicare patients.<sup>170</sup> In recognition of persistent health disparities and the importance of closing the health equity gap, we request information on revising several related CMS programs to make reporting of health disparities based on social risk factors and race and ethnicity more comprehensive and actionable for hospitals, providers, and patients. The following is part of an ongoing effort across CMS to evaluate appropriate initiatives to reduce health disparities. Feedback will be used to inform the creation of a future, comprehensive, RFI focused on closing the health equity gap in CMS programs and policies (86 FR 25554 through 25556).

Belonging to a racial or ethnic minority group; living with a disability; being a member of the lesbian, gay, bisexual, transgender, and queer (LGBTQ+) community; living in a rural area; or being near or below the poverty level, is often associated with worse health outcomes.<sup>171 172 173 174 175 176 177 178</sup> Such disparities in health outcomes are the result of number of factors, but importantly for CMS programs, although not the sole determinant, poor access and provision of lower quality health care contribute to health disparities. For instance, numerous studies have shown

<sup>170</sup> Ochieng N, Cubanski J, Neuman T, Artiga S, Damico A. Racial and Ethnic Health Inequities and Medicare. KFF. February 2021.

<sup>171</sup> Joynt KE, Orav E, Jha AK. Thirty-Day Readmission Rates for Medicare Beneficiaries by Race and Site of Care. JAMA. 2011;305(7):675–681.

<sup>172</sup> Lindenauer PK, Lagu T, Rothberg MB, et al. Income Inequality and 30 Day Outcomes After Acute Myocardial Infarction, Heart Failure, and Pneumonia: Retrospective Cohort Study. British Medical Journal. 2013;346.

<sup>173</sup> Trivedi AN, Nsa W, Hausmann LRM, et al. Quality and Equity of Care in U.S. Hospitals. New England Journal of Medicine. 2014;371(24):2298–2308.

<sup>174</sup> Polyakova, M., et al. Racial Disparities In Excess All-Cause Mortality During The Early COVID–19 Pandemic Varied Substantially Across States. Health Affairs. 2021; 40(2): 307–316.

<sup>175</sup> Rural Health Research Gateway. Rural Communities: Age, Income, and Health Status. Rural Health Research Recap. November 2018.

<sup>176</sup> [https://www.minorityhealth.hhs.gov/assets/PDF/Update\\_HHS\\_Disparities\\_Dept-FY2020.pdf](https://www.minorityhealth.hhs.gov/assets/PDF/Update_HHS_Disparities_Dept-FY2020.pdf).

<sup>177</sup> [www.cdc.gov/mmwr/volumes/70/wr/mm7005a1.htm](http://www.cdc.gov/mmwr/volumes/70/wr/mm7005a1.htm).

<sup>178</sup> Poteat TC, Reisner SL, Miller M, Wirtz AL. COVID–19 Vulnerability of Transgender Women With and Without HIV Infection in the Eastern and Southern U.S. Preprint. medRxiv. 2020;2020.07.21.20159327. Published 2020 Jul 24. doi:10.1101/2020.07.21.20159327.



among Medicare beneficiaries, racial and ethnic minority individuals often receive lower quality of care, report lower experiences of care, and experience more frequent hospital readmissions and procedural complications.<sup>179 180 181 182 183 184</sup>

We are committed to achieving equity in health care outcomes for Medicare beneficiaries by supporting providers in quality improvement activities to reduce health inequities, enabling them to make more informed decisions, and promoting provider accountability for health care disparities.<sup>185</sup> For the purposes of this rule, we are using a definition of equity established in Executive Order 13985, issued on January 25, 2021, as “the consistent and systematic fair, just, and impartial treatment of all individuals, including individuals who belong to underserved communities who have been denied such treatment, such as Black, Latino, and Indigenous and Native American persons, Asian Americans and Pacific Islanders and other persons of color; members of religious minorities; lesbian, gay, bisexual, transgender, and queer (LGBTQ+) persons; persons with disabilities; persons who live in rural areas; and persons otherwise adversely affected by persistent poverty or inequality.”<sup>186</sup> We note this definition was recently established and provides a useful, common definition for equity across different areas of government,

although numerous other definitions of equity exist.

Our ongoing commitment to closing the equity gap in CMS quality programs is demonstrated by a portfolio of programs aimed at making information on the quality of health care providers and services, including disparities, more transparent to consumers and providers. The CMS Equity Plan for Improving Quality in Medicare outlines a path to equity which aims to support Quality Improvement Network Quality Improvement Organizations (QIN-QIOs); Federal, State, local, and tribal organizations; providers; researchers; policymakers; beneficiaries and their families; and other stakeholders in activities to achieve health equity.<sup>187</sup> The CMS Equity Plan for Improving Quality in Medicare focuses on three core priority areas which inform our policies and programs: (1) Increasing understanding and awareness of health disparities; (2) developing and disseminating solutions to achieve health equity; and (3) implementing sustainable actions to achieve health equity.<sup>188</sup> The CMS Quality Strategy<sup>189</sup> and Meaningful Measures Framework<sup>190</sup> also include elimination of racial and ethnic disparities as central principles. Our efforts aimed at closing the health equity gap to date have included providing transparency of health disparities, supporting providers with evidence-informed solutions to achieve health equity, and reporting to providers on gaps in quality as follows:

- *The CMS Mapping Medicare Disparities Tool* which is an interactive map which identifies areas of disparities and is a starting point to understand and investigate geographic, racial and ethnic differences in health outcomes for Medicare patients.<sup>191</sup>
- *The Racial, Ethnic, and Gender Disparities in Health Care in Medicare*

*Advantage Stratified Report*, which highlights racial and ethnic differences in health care experiences and clinical care, compares quality of care for women and men, and looks at racial and ethnic differences in quality of care among women and men separately for Medicare Advantage plans.<sup>192</sup>

- *The Rural-Urban Disparities in Health Care in Medicare Report* which details rural-urban differences in health care experiences and clinical care.<sup>193</sup>
- *The Standardized Patient Assessment Data Elements* for certain post-acute care Quality Reporting Programs, which now includes data reporting for race and ethnicity and preferred language, in addition to screening questions for social needs (84 FR 42536 through 42588)

- *The CMS Innovation Center's Accountable Health Communities Model* which includes standardized collection of health-related social needs data.
- *The Guide to Reducing Disparities* which provides an overview of key issues related to disparities in readmissions and reviews set of activities which can help hospital leaders reduce readmissions in diverse populations.<sup>194</sup>
- *The CMS Disparity Methods* which provide hospital-level confidential results stratified by dual eligibility for condition-specific readmission measures currently included in the Hospital Readmissions Reduction Program (see 84 FR 42496 through 42500 for a discussion of using stratified data in additional measures).

These programs are informed by reports by the National Academies of Science, Engineering and Medicine (NASEM)<sup>195</sup> and the Office of the Assistant Secretary for Planning and Evaluation (ASPE)<sup>196</sup> which have examined the influence of social risk factors on several of our quality programs. In this RFI, we discuss

<sup>179</sup> Martino, SC, Elliott, MN, Dembosky, JW, Hambarsoomian, K, Burkhart, Q, Klein, DJ, Gildner, J, and Haviland, AM. Racial, Ethnic, and Gender Disparities in Health Care in Medicare Advantage. Baltimore, MD: CMS Office of Minority Health. 2020.

<sup>180</sup> Guide to Reducing Disparities in Readmissions. CMS Office of Minority Health. Revised August 2018. Available at [https://www.cms.gov/About-CMS/Agency-Information/OMH/Downloads/OMH\\_Readmissions\\_Guide.pdf](https://www.cms.gov/About-CMS/Agency-Information/OMH/Downloads/OMH_Readmissions_Guide.pdf).

<sup>181</sup> Singh JA, Lu X, Rosenthal GE, Ibrahim S, Cram P. Racial disparities in knee and hip total joint arthroplasty: An 18-year analysis of national Medicare data. *Ann Rheum Dis*. 2014 Dec;73(12):2107–15.

<sup>182</sup> Rivera-Hernandez M, Rahman M, Mor V, Trivedi AN. Racial Disparities in Readmission Rates among Patients Discharged to Skilled Nursing Facilities. *J Am Geriatr Soc*. 2019 Aug;67(8):1672–1679.

<sup>183</sup> Joynt KE, Orav E, Jha AK. Thirty-Day Readmission Rates for Medicare Beneficiaries by Race and Site of Care. *JAMA*. 2011;305(7):675–681.

<sup>184</sup> Tsai TC, Orav EJ, Joynt KE. Disparities in surgical 30-day readmission rates for Medicare beneficiaries by race and site of care. *Ann Surg*. Jun 2014;259(6):1086–1090.

<sup>185</sup> <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/QualityInitiativesGenInfo/Downloads/CMS-Quality-Strategy.pdf>.

<sup>186</sup> <https://www.federalregister.gov/documents/2021/01/25/2021-01753/advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government>.

<sup>187</sup> Centers for Medicare & Medicaid Services Office of Minority Health. The CMS Equity Plan for Improving Quality in Medicare. 2015–2021. [https://www.cms.gov/About-CMS/Agency-Information/OMH/OMH\\_Dwnld-CMS\\_EquityPlanforMedicare\\_090615.pdf](https://www.cms.gov/About-CMS/Agency-Information/OMH/OMH_Dwnld-CMS_EquityPlanforMedicare_090615.pdf).

<sup>188</sup> Centers for Medicare & Medicaid Services Office of Minority Health. The CMS Equity Plan for Improving Quality in Medicare. [https://www.cms.gov/About-CMS/Agency-Information/OMH/OMH\\_Dwnld-CMS\\_EquityPlanforMedicare\\_090615.pdf](https://www.cms.gov/About-CMS/Agency-Information/OMH/OMH_Dwnld-CMS_EquityPlanforMedicare_090615.pdf).

<sup>189</sup> Centers for Medicare & Medicaid Services. CMS Quality Strategy. 2016. <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/QualityInitiativesGenInfo/Downloads/CMS-Quality-Strategy.pdf>.

<sup>190</sup> <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/QualityInitiativesGenInfo/MMF/General-info-Sub-Page>.

<sup>191</sup> <https://www.cms.gov/About-CMS/Agency-Information/OMH/OMH-Mapping-Medicare-Disparities>.

<sup>192</sup> <https://www.cms.gov/About-CMS/Agency-Information/OMH/research-and-data/statistics-and-data/stratified-reporting>.

<sup>193</sup> Centers for Medicare & Medicaid Services. Rural-Urban Disparities in Health Care in Medicare. 2019. <https://www.cms.gov/About-CMS/Agency-Information/OMH/Downloads/Rural-Urban-Disparities-in-Health-Care-in-Medicare-Report.pdf>.

<sup>194</sup> Guide to Reducing Disparities in Readmissions. CMS Office of Minority Health. Revised August 2018. Available at [https://www.cms.gov/About-CMS/Agency-Information/OMH/Downloads/OMH\\_Readmissions\\_Guide.pdf](https://www.cms.gov/About-CMS/Agency-Information/OMH/Downloads/OMH_Readmissions_Guide.pdf).

<sup>195</sup> National Academies of Sciences, Engineering, and Medicine. 2016. Accounting for Social Risk Factors in Medicare Payment: Identifying Social Risk Factors. Washington, DC: The National Academies Press. <https://doi.org/10.17226/21858>.

<sup>196</sup> <https://aspe.hhs.gov/pdf-report/report-congress-social-risk-factors-and-performance-under-medicares-value-based-purchasing-programs>.

initiatives specific to further bridging the health equity gap within the MIPS track of the Quality Payment Program.

In Appendix 2: Improvement Activities of this final rule, we discussed an improvement activity titled “create and implement an anti-racism plan”. This improvement activity acknowledges it is insufficient to gather and analyze data by race, and document disparities by different population groups. Rather, it emphasizes systemic racism is the root cause for differences in health outcomes between socially defined racial groups. Further, we also proposed to modify five existing improvement activities to address health equity. We note that some improvement activities within our current Inventory already aim to improve equity. We believe further modifying them can more explicitly link the activity to health equity without changing the core activity. In other cases, our proposals to modify an activity fundamentally shifts the activity to focus on health equity specifically.

Additionally, in the CY 2022 PFS proposed rule (86 FR 39439 through 39446), we proposed to update the complex patient bonus formula. We specifically refer to ASPE’s second report, Social Risk and Performance in Medicare’s Value-Based Purchasing Programs, which was publicly-released in May 2020.<sup>197</sup> The second report builds on the analyses included in the initial report and provides additional insight for addressing risk factors in MIPS and other value-based payment programs. More specifically, the report has a 3-pronged strategy approach to: Measure and report quality; set high, fair quality standards; and reward and support better outcomes for beneficiaries with social risk. As a part of this 3-pronged strategy, the report supports use of the complex patient bonus in MIPS, explaining that it is well supported because this policy gives additional points to clinicians with a higher share of medically and socially complex patients and does not lower the standard of care. Hence, although, ASPE’s reports to Congress support the use of a complex patient bonus at the final score level, we respond to other findings reported in other literature studies by identifying ways to make the complex patient bonus more targeted for clinicians caring for high risk and complex patients and to mitigate differences in resources that affect MIPS scores. Hence, the proposed formula is

based on standardized scores and to reward only those clinicians who fall in higher quintiles in order to focus the bonus on those serving a higher proportion of more complex and vulnerable patients.

Lastly, we acknowledge that small practices within the MIPS program often face challenges in many ways. More specifically, as noted in section IV.A.3.e.(2) of this final rule, the Quality Payment Program gives an advantage to large organizations because such organizations have more resources invested in the infrastructure required to track and report measures to MIPS (82 FR 53776). In response to the feedback on the potential burden on small practices, we have established special policies available for small practices including the small practice bonus and special scoring policies. For example, in the CY 2018 QPP final rule (82 FR 53682 through 53683), we established a significant hardship exception for small practices for the Promoting Interoperability performance category. To further alleviate the burden on small practices and reduce this disparity between large and small practices, we proposed in section IV.A.3.d.(4) to automatically redistribute the Promoting Interoperability performance category weight for any small practice that does not submit data for the performance category, and in section IV.A.3.e.(2), we proposed different redistribution weights for small practices.

We are committed to advancing health equity by improving data collection to better measure and analyze disparities across programs and policies.<sup>198</sup> We have been considering, among other things, expanding our efforts to provide stratified data for additional social risk factors and measures, optimizing the ease-of-use of the results, enhancing public transparency of equity results, and building towards provider accountability for health equity. We solicited public comments on two potential future expansions of the CMS Disparity Methods, including: (1) Future potential stratification of quality measure results by race and ethnicity, and (2) improving demographic data collection.

(1) Future Potential Stratification of Quality Measure Results by Race and Ethnicity

The Administration’s *Executive Order on Advancing Racial Equity and Support for Underserved Communities Through the Federal Government* directs agencies to assess potential barriers that underserved communities and individuals may face to enrollment in and access to benefits and services in Federal programs. As summarized previously, studies have shown that among Medicare beneficiaries, racial and ethnic minority persons often experience worse health outcomes, including more frequent hospital readmissions and procedural complications. We are considering expanding the disparity methods to include stratification of the condition/procedure-specific readmission measures by race and ethnicity. The 1997 Office of Management and Budget (OMB) Revisions to the Standards for the Collection of Federal Data on Race and Ethnicity, outlines the racial and ethnic categories which may potentially be used for reporting the disparity methods, which we note are intended to be considered as social and cultural, and not biological or genetic.<sup>199</sup> The 1997 OMB Standard lists five minimum categories of race: (1) American Indian or Alaska Native; (2) Asian; (3) Black or African American; (4) Native Hawaiian or Other Pacific Islander; (5) and White. In the OMB standards, Hispanic or Latino is the only ethnicity category included, and since race and ethnicity are two separate and distinct concepts, persons who report themselves as Hispanic or Latino can be of any race.<sup>200</sup> Another example, the “Race & Ethnicity—CDC” code system in PHIN Vocabulary Access and Distribution System (VADS)<sup>201</sup> permits a much more granular structured recording of a patient’s race and ethnicity with its inclusion of over 900 concepts for race and ethnicity. The recording and exchange of patient race and ethnicity at such a granular level can facilitate the accurate identification and analysis of health disparities based on race and ethnicity. Further, the “Race & Ethnicity—CDC” code system has a hierarchy that rolls up to the OMB

<sup>199</sup> Executive Office of the President Office of Management and Budget, Office of Information and Regulatory Affairs. Revisions to the standards for the classification of Federal data on race and ethnicity. Vol 62. **Federal Register**. 1997:58782–58790.

<sup>200</sup> <https://www.census.gov/topics/population/hispanic-origin/about.html>.

<sup>201</sup> <https://phin.vads.cdc.gov/vads/ViewValueSet.action?id=67D34BBC-617F-DD11-B38D-00188B398520>.

<sup>197</sup> Social Risk and Performance in Medicare’s Value-Based Purchasing Programs. ASPE Second Report. May 2020. <https://aspe.hhs.gov/pdf-report/second-impact-report-to-congress>.

<sup>198</sup> Centers for Medicare Services. CMS Quality Strategy. 2016. <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/QualityInitiativesGenInfo/Downloads/CMS-Quality-Strategy.pdf>.



**Table A: New Improvement Activities for the CY 2022 Performance Period/2024 MIPS Payment Year and Future Years**

<b>New Improvement Activity</b>	
<b>Proposed Activity ID:</b>	<b>IA AHE 8</b>
<b>Proposed Subcategory:</b>	Achieving Health Equity
<b>Proposed Activity Title:</b>	Create and Implement an Anti-Racism Plan
<b>Proposed Activity Description:</b>	<p>Create and implement an anti-racism plan using the <a href="#">CMS Disparities Impact Statement</a> or other <a href="#">anti-racism planning tools</a>.<sup>1</sup> The plan should include a clinic-wide review of existing tools and policies, such as value statements or clinical practice guidelines, to ensure that they include and are aligned with a commitment to anti-racism and an understanding of race as a political and social construct, not a physiological one.</p> <p>The plan should also identify ways in which issues and gaps identified in the review can be addressed and should include target goals and milestones for addressing prioritized issues and gaps. This may also include an assessment and drafting of an organization's plan to prevent and address racism and/or improve language access and accessibility to ensure services are accessible and understandable for those seeking care. The MIPS eligible clinician or practice can also consider including in their plan ongoing training on anti-racism and/or other processes to support identifying explicit and implicit biases in patient care and addressing historic health inequities experienced by people of color. More information about elements of the CMS Disparities Impact Statement is detailed in the template and action plan document at <a href="https://www.cms.gov/About-CMS/Agency-Information/OMH/Downloads/Disparities-Impact-Statement-508-rev102018.pdf">https://www.cms.gov/About-CMS/Agency-Information/OMH/Downloads/Disparities-Impact-Statement-508-rev102018.pdf</a>.</p>
<b>Proposed Weighting:</b>	High
<b>Rationale:</b>	<p>The proposed activity aimed to address systemic inequities, including systemic racism, as called for in Executive Order 13985: Advancing Racial Equity and Support for Underserved Communities Through the Federal Government, published January 20, 2021.<sup>2</sup> This activity began with the premise that it is important to acknowledge systemic racism as a root cause for differences in health outcomes between socially-defined racial groups.<sup>3,4</sup></p> <p>We believe this activity has the potential to improve clinical practice or care delivery and is likely to result in improved outcomes, per the improvement activity definition at § 414.1305, because it supports MIPS eligible clinicians in identifying health disparities and implementing processes to reduce racism and provide equitable quality health care. This activity is intended to help MIPS eligible clinicians move beyond analyzing data to taking real steps to naming and eliminating the causes of the disparities identified. We also proposed making this activity high-weighted because MIPS eligible clinicians will need considerable time and resources to develop a thorough anti-racism plan that is informed by data, and to implement it throughout the practice or system. See the definition for high weighting in the CY 2019 PFS final rule (83 FR 59780 through 59781).</p>
<b>Comments:</b>	Several commenters expressed support for the proposal to adopt this improvement activity, and for the high weight that we assigned to it. One commenter stated that this activity would be easier for larger, more established practices than smaller or solo practices to adopt. Another commenter stated that CMS should encourage MIPS eligible clinicians to implement this and other new equity-related activities for longer than 90 days to track and impact real improvement.
<b>Response:</b>	We appreciate the commenters' support. We disagree that this activity would be more appropriate for larger, more established practices to adopt. A small or new practice could tailor the activity to their context, fulfilling the requirements within their constraints in the same way as a larger, more established practice. MIPS eligible clinicians will be encouraged to fit these requirements to their specific context. We currently require a minimum of 90 days for the implementation period of this activity, but we support MIPS eligible clinicians who wish to implement this activity for longer periods of time. MIPS eligible clinicians could also attest to this activity in multiple years as they make steady progress towards intended outcomes. As mentioned in the Disparities Impact Statement, CMS offers technical assistance on health equity which a MIPS-eligible clinician can access by emailing <a href="mailto:healthequityTA@cms.hhs.gov">healthequityTA@cms.hhs.gov</a> .
<b>Final Action:</b>	After consideration of the public comments we received, we are finalizing this activity as proposed.
<b>Finalized Improvement Activity</b>	
<b>Activity ID:</b>	<b>IA AHE 8</b>
<b>Subcategory:</b>	Achieving Health Equity



Activity Title:	Create and Implement an Anti-Racism Plan
Activity Description:	<p>Create and implement an anti-racism plan using the <a href="#">CMS Disparities Impact Statement or other anti-racism planning tools</a>.<sup>1</sup> The plan should include a clinic-wide review of existing tools and policies, such as value statements or clinical practice guidelines, to ensure that they include and are aligned with a commitment to anti-racism and an understanding of race as a political and social construct, not a physiological one.</p> <p>The plan should also identify ways in which issues and gaps identified in the review can be addressed and should include target goals and milestones for addressing prioritized issues and gaps. This may also include an assessment and drafting of an organization's plan to prevent and address racism and/or improve language access and accessibility to ensure services are accessible and understandable for those seeking care. The MIPS eligible clinician or practice can also consider including in their plan ongoing training on anti-racism and/or other processes to support identifying explicit and implicit biases in patient care and addressing historic health inequities experienced by people of color. More information about elements of the CMS Disparities Impact Statement is detailed in the template and action plan document at <a href="https://www.cms.gov/About-CMS/Agency-Information/OMH/Downloads/Disparities-Impact-Statement-508-rev102018.pdf">https://www.cms.gov/About-CMS/Agency-Information/OMH/Downloads/Disparities-Impact-Statement-508-rev102018.pdf</a>.</p>
Weighting:	High
<b>New Improvement Activity</b>	
Proposed Activity ID:	IA_AHE_9
Proposed Subcategory:	Achieving Health Equity
Proposed Activity Title:	Implement Food Insecurity and Nutrition Risk Identification and Treatment Protocols
Proposed Activity Description:	<p>Create or improve, and then implement, protocols for identifying and providing appropriate support to: a) patients with or at risk for food insecurity, and b) patients with or at risk for poor nutritional status. (Poor nutritional status is sometimes referred to as clinical malnutrition or undernutrition and applies to people who are overweight and underweight.) Actions to implement this improvement activity may include, but are not limited to, the following:</p> <ul style="list-style-type: none"> <li>• Use Malnutrition Quality Improvement Initiative (MQii) or other quality improvement resources and standardized screening tools to assess and improve current food insecurity and nutritional screening and care practices.</li> <li>• Update and use clinical decision support tools within the MIPS eligible clinician's electronic medical record to align with the new food insecurity and nutrition risk protocols.</li> <li>• Update and apply requirements for staff training on food security and nutrition.</li> <li>• Update and provide resources and referral lists, and/or engage with community partners to facilitate referrals for patients who are identified as at risk for food insecurity or poor nutritional status during screening.</li> </ul> <p>Activities must be focused on patients at greatest risk for food insecurity and/or malnutrition—for example patients with low income who live in areas with limited access to affordable fresh food, or who are isolated or have limited mobility.</p>
Proposed Weighting:	Medium
Rationale:	<p>Food insecurity is a widespread and worsening issue in the United States. Estimates indicate that the number of food insecure people in the United States increased from 35.2 million people (1 in 9 people) in 2019 to 45 million people (1 in 7 people) in 2020.<sup>5</sup> Older adults are particularly at risk because of low income, mobility issues, dementia, and other factors such as social isolation. Food insecurity also disproportionately affects Black and Latinx households.<sup>6</sup></p> <p>Malnutrition is also widespread in the United States.<sup>7</sup> Both food insecurity and malnutrition are associated with worse health outcomes and higher spending on healthcare. <sup>Error! Bookmark not defined.</sup> For example, adults who are malnourished at the time of hospitalization or surgery are more likely to have worse hospitalization, surgical, and recovery outcomes.<sup>8</sup></p> <p>The improvement activity would fill a gap in the inventory, which does not currently include an improvement activity related to food insecurity or malnutrition. We believe this activity has the potential to improve clinical practice or care delivery and is likely to result in improved outcomes, because ameliorating food insecurity and malnutrition leads to better health outcomes.<sup>9,10</sup> This activity would create an opportunity for MIPS eligible clinicians to help address food insecurity and malnutrition, and provide the Malnutrition Quality Improvement Initiative as a resource.<sup>11</sup> Evidence indicates that they can help patients by increasing enrollment in the Supplemental Nutrition Assistance Program (SNAP) (<a href="https://www.fns.usda.gov/snap/supplemental-nutrition-assistance-program">https://www.fns.usda.gov/snap/supplemental-nutrition-assistance-program</a>), which is associated with reduced food insecurity<sup>12</sup> or connecting their patients to other community resources. This activity also created an opportunity for MIPS eligible clinicians to help address malnutrition by ensuring patients in need receive a detailed nutritional assessment and appropriate nutritional care.</p>



	We proposed weighting this activity medium, because this activity may be accomplished by providing literature and/or facilitating a conversation with a patient during a regular visit. The estimated level of effort for MIPS eligible clinicians is comparable to other medium-weighted activities in the inventory, and less than that of high-weighted activities. See the definition of medium weighting in the CY 2019 PFS final rule (83 FR 59780 through 59781).
Comments:	Several commenters expressed support for the proposal to adopt this improvement activity. One commenter stated that this activity would be easier for larger, more established practices than smaller or solo practices to adopt. Another commenter reminded CMS that malnutrition in food insecure individuals can present as either undernutrition or overnutrition.
Response:	We appreciate the commenters' support. We disagree that this activity would be more appropriate for larger, more established practices to adopt. A small or new practice could tailor the activity to their context, fulfilling the requirements within their constraints in the same way as a larger, more established practice. We agree with the commenter who stated that malnutrition in food insecure individuals can present as either undernutrition or overnutrition. We also note that CMS offers technical assistance on health equity which a MIPS eligible clinician can access by emailing <a href="mailto:healthequityTA@cms.hhs.gov">healthequityTA@cms.hhs.gov</a> .
Final Action:	After consideration of the public comments we received, we are finalizing this activity as proposed.
<b>Finalized Improvement Activity</b>	
Activity ID:	IA_AHE_9
Subcategory:	Achieving Health Equity
Activity Title:	Implement Food Insecurity and Nutrition Risk Identification and Treatment Protocols
Activity Description:	<p>Create or improve, and then implement, protocols for identifying and providing appropriate support to: a) patients with or at risk for food insecurity, and b) patients with or at risk for poor nutritional status. (Poor nutritional status is sometimes referred to as clinical malnutrition or undernutrition and applies to people who are overweight and underweight.) Actions to implement this improvement activity may include, but are not limited to, the following:</p> <ul style="list-style-type: none"> <li>• Use Malnutrition Quality Improvement Initiative (MQii) or other quality improvement resources and standardized screening tools to assess and improve current food insecurity and nutritional screening and care practices.</li> <li>• Update and use clinical decision support tools within the MIPS eligible clinician's electronic medical record to align with the new food insecurity and nutrition risk protocols.</li> <li>• Update and apply requirements for staff training on food security and nutrition.</li> <li>• Update and provide resources and referral lists, and/or engage with community partners to facilitate referrals for patients who are identified as at risk for food insecurity or poor nutritional status during screening.</li> </ul> <p>Activities must be focused on patients at greatest risk for food insecurity and/or malnutrition—for example patients with low income who live in areas with limited access to affordable fresh food, or who are isolated or have limited mobility.</p>
Weighting:	Medium
<b>New Improvement Activity</b>	
Proposed Activity ID:	IA_BMH_11
Proposed Subcategory:	Behavioral and Mental Health
Proposed Activity Title:	Implementation of a Trauma-Informed Care (TIC) Approach to Clinical Practice
Proposed Activity Description:	<p>Create and implement a plan for trauma-informed care (TIC) that recognizes the potential impact of trauma experiences on patients and takes steps to mitigate the effects of adverse events in order to avoid re-traumatizing or triggering past trauma. Actions in this plan may include, but are not limited to, the following:</p> <ul style="list-style-type: none"> <li>• Incorporate trauma-informed training into new employee orientation</li> <li>• Offer annual refreshers and/or trainings for all staff</li> <li>• Recommend and supply TIC materials to third party partners, including care management companies and billing services</li> <li>• Identify patients using a screening methodology</li> <li>• Flag charts for patients with one or more adverse events that might have caused trauma</li> <li>• Use ICD-10 diagnosis codes for adverse events when appropriate</li> </ul> <p>TIC is a strengths-based healthcare delivery approach that emphasizes physical, psychological, and emotional safety for both trauma survivors and their providers.<sup>13</sup> Core components of a TIC approach are: awareness of the prevalence of trauma; understanding of the impact of past trauma on services utilization and engagement; and a commitment and plan to incorporate that understanding into training, policy, procedure, and practice.<sup>14</sup></p>
Proposed Weighting:	Medium



Rationale:	<p>We proposed this activity because the psychological impact of trauma influences the clinical care needs of a large population in the United States and adopting a TIC approach could help all MIPS eligible clinicians avoid retraumatizing affected patients and support providers and staff who have experienced trauma themselves.<sup>15</sup> Research indicates that MIPS eligible clinicians have a positive view of TIC but need more resources and support to apply the concepts to practice.<sup>16</sup></p> <p>For the purposes of this proposed improvement activity, trauma is the experience of a harmful or life-threatening event or series of events and their longer-term psychological impact, which can include development of post-traumatic stress disorder (PTSD) and changes to brain functioning and even genetics.<sup>17</sup> Approximately 60 percent of men and 50 percent of women in the U.S. have experienced trauma in their lifetimes and 7-8 percent of the population will have PTSD at some point in their lives.<sup>18</sup> Multi-generational trauma, whereby experiences that traumatized earlier generations, such as the genocide of Native American tribes, are passed down, impact many families and communities.<sup>19</sup> Clinicians (and not just mental health clinicians) who take a TIC approach anticipate and avoid institutional processes and individual practices that are likely to retraumatize individuals who have histories of trauma.<sup>20</sup> We believe this activity has the potential to improve clinical practice or care delivery and is likely to result in improved outcomes, because trauma-informed approaches in healthcare are associated with improved outcomes for patients.<sup>21</sup></p> <p>We proposed weighting this activity medium, because this activity may be accomplished by conducting a training, providing resources, or incorporating new procedures into a MIPS eligible clinician's practice. The estimated level of effort for MIPS eligible clinicians is comparable to other medium-weighted activities in the inventory, and less than that of high-weighted activities. See the definition of medium weighting in the CY 2019 PFS final rule (83 FR 59780 through 59781).</p>
Comments:	Several commenters expressed support for the proposal to adopt this improvement activity. One commenter stated that this activity would be easier for larger, more established practices than smaller or solo practices to adopt.
Response:	<p>We appreciate the commenters' support. We disagree that this activity would be more appropriate for larger, more established practices to adopt. A small or new practice could tailor the activity to their context, fulfilling the requirements within their constraints in the same way as a larger, more established practice. They can also consider using the Substance Abuse and Mental Health Services Administration's resource for providers who seek additional information about Trauma-Informed Care at: <a href="https://www.samhsa.gov/sites/default/files/programs_campaigns/childrens_mental_health/atc-whitepaper-040616.pdf">https://www.samhsa.gov/sites/default/files/programs_campaigns/childrens_mental_health/atc-whitepaper-040616.pdf</a>.<sup>16</sup></p>
Final Action:	After consideration of the public comments we received, we are finalizing this activity as proposed.
<b>Finalized Improvement Activity</b>	
Activity ID:	<b>IA BMH 11</b>
Subcategory:	Behavioral and Mental Health
Activity Title:	Implementation of a Trauma-Informed Care (TIC) Approach to Clinical Practice
Activity Description:	<p>Create and implement a plan for trauma-informed care (TIC) that recognizes the potential impact of trauma experiences on patients and takes steps to mitigate the effects of adverse events in order to avoid re-traumatizing or triggering past trauma. Actions in this plan may include, but are not limited to, the following:</p> <ul style="list-style-type: none"> <li>• Incorporate trauma-informed training into new employee orientation</li> <li>• Offer annual refreshers and/or trainings for all staff</li> <li>• Recommend and supply TIC materials to third party partners, including care management companies and billing services</li> <li>• Identify patients using a screening methodology</li> <li>• Flag charts for patients with one or more adverse events that might have caused trauma</li> <li>• Use ICD-10 diagnosis codes for adverse events when appropriate</li> </ul> <p>TIC is a strengths-based healthcare delivery approach that emphasizes physical, psychological, and emotional safety for both trauma survivors and their providers.<sup>13</sup> Core components of a TIC approach are: awareness of the prevalence of trauma; understanding of the impact of past trauma on services utilization and engagement; and a commitment and plan to incorporate that understanding into training, policy, procedure, and practice.<sup>14</sup></p>
Weighting:	Medium



New Improvement Activity	
<b>Proposed Activity ID:</b>	<b>IA BMH 12</b>
<b>Proposed Subcategory:</b>	Behavioral and Mental Health
<b>Proposed Activity Title:</b>	Promoting Clinician Well-Being
<b>Proposed Activity Description:</b>	<p>Develop and implement programs to support clinician well-being and resilience—for example, through relationship-building opportunities, leadership development plans, or creation of a team within a practice to address clinician well-being—using one of the following approaches:</p> <ul style="list-style-type: none"> <li>• Completion of clinician survey on clinician well-being with subsequent implementation of an improvement plan based on the results of the survey.</li> <li>• Completion of training regarding clinician well-being with subsequent implementation of a plan for improvement.</li> </ul>
<b>Proposed Weighting:</b>	High
<b>Rationale:</b>	<p>We believe this activity would help MIPS eligible clinicians prioritize and improve their own well-being and the well-being of their staff and colleagues. Focusing on improving clinician well-being is especially critical now, given the stress that the COVID-19 public health emergency has exerted on clinicians. Many organizations, including the National Academies of Sciences, Engineering, and Medicine,<sup>22</sup> have prioritized interventions to improve clinician well-being. Studies indicate that clinician burnout, including emotional exhaustion, depersonalization, and reduced personal accomplishment, is associated with poorer quality healthcare and reduced safety for patients.<sup>23, 24</sup> Studies also indicate that some interventions have been shown to reduce burnout and improve well-being.<sup>25</sup></p> <p>This improvement activity would fill a gap in the inventory because it does not currently include an improvement activity related to clinician well-being. We believe this activity has the potential to improve clinical practice or care delivery and is likely to result in improved outcomes, because promoting clinician well-being and mitigating burnout leads to better quality health care and increased patient safety.<sup>25</sup></p> <p>Given the impact of the COVID-19 pandemic on the medical community and the considerable time and resources required to mitigate its effects and promote well-being among clinicians, we believe that this activity should be weighted as high, in alignment with our definition in the CY 2019 PFS final rule (83 FR 59780 through 59781).</p>
<b>Comments:</b>	One commenter expressed support for the proposal to adopt this improvement activity but recommended that CMS modify it so that both the survey and training are required components of the activity; surveys contain relevant questions by role; and that the survey be conducted annually. The commenter also suggested that MIPS eligible clinicians implementing this activity combine the clinician well-being survey with all other essential workforce themed surveys to minimize survey fatigue.
<b>Response:</b>	We appreciate the commenter's support. The option to choose between a clinician survey and a training on clinician well-being provides two ways a MIPS eligible clinician could meet the requirements for this activity, tailored to the clinician's practice's needs and abilities. The requirement to implement a plan for improvement with either the survey or training further ensures that a MIPS eligible clinician selecting this activity take action towards improving clinician well-being. A clinician may also conduct surveys annually and attest to this activity in multiple years as they make steady progress towards intended outcomes.
<b>Final Action:</b>	After consideration of the public comments we received, we are finalizing this activity as proposed.
Finalized Improvement Activity	
<b>Activity ID:</b>	<b>IA BMH 12</b>
<b>Subcategory:</b>	Behavioral and Mental Health
<b>Activity Title:</b>	Promoting Clinician Well-Being
<b>Activity Description:</b>	<p>Develop and implement programs to support clinician well-being and resilience—for example, through relationship-building opportunities, leadership development plans, or creation of a team within a practice to address clinician well-being—using one of the following approaches:</p> <ul style="list-style-type: none"> <li>• Completion of clinician survey on clinician well-being with subsequent implementation of an improvement plan based on the results of the survey.</li> <li>• Completion of training regarding clinician well-being with subsequent implementation of a plan for improvement.</li> </ul>
<b>Weighting:</b>	High
New Improvement Activity	
<b>Proposed Activity ID:</b>	<b>IA ERP 4</b>
<b>Proposed Subcategory:</b>	Emergency Response and Preparedness
<b>Proposed Activity Title:</b>	Implementation of a Personal Protective Equipment (PPE) Plan
<b>Proposed Activity Description:</b>	Implement a plan to acquire, store, maintain, and replenish supplies of personal protective equipment (PPE) for all clinicians or other staff who are in physical proximity to patients.



	<p>In accordance with guidance from the Centers for Disease Control and Prevention (CDC) the PPE plan should address:</p> <ul style="list-style-type: none"> <li>• Conventional capacity: PPE controls that should be implemented in general infection prevention and control plans in healthcare settings, including training in proper PPE use.</li> <li>• Contingency capacity: actions that may be used temporarily during periods of expected PPE shortages.</li> <li>• Crisis capacity: strategies that may need to be considered during periods of known PPE shortages.</li> </ul> <p>The PPE plan should address all of the following types of PPE:</p> <ul style="list-style-type: none"> <li>• Standard precautions (e.g., hand hygiene, prevention of needle-stick or sharps injuries, safe waste management, cleaning and disinfection of the environment)</li> <li>• Eye protection</li> <li>• Gowns (including coveralls or aprons)</li> <li>• Gloves</li> <li>• Facemasks</li> <li>• Respirators (including N95 respirators)</li> </ul>
Proposed Weighting:	Medium
Rationale:	<p>The COVID-19 pandemic illustrated the importance of maintaining adequate PPE supplies for caregivers. Especially early in the pandemic, inadequate PPE supplies reduced access to care and exposed healthcare workers to unnecessary risk.<sup>26</sup></p> <p>While clinicians may be following surge capacity procedures, they may not have a written plan for both preventing and preparing for surge capacity. In a survey conducted in mid-March of 2020, over 50 percent of physician practices cited a lack of supplies as an obstacle to caregiving.<sup>27</sup> Also, in a 2009 survey of American College of Emergency Physician Disaster Medicine Section members, fewer than 75 percent of respondents indicated that their emergency department had a plan for responding to pandemic influenza and other infectious disease threats.<sup>28</sup> This proposed improvement activity is based on the CDC guidelines for optimizing PPE supplies<sup>29</sup> and aligns with World Health Organization guidelines.<sup>30</sup></p> <p>We believe that including this improvement activity in the inventory would encourage formalizing the process for creating a PPE plan, training staff, and ensuring adequate PPE inventory. Thus, it has the potential to improve clinical practice or care delivery and is likely to result in improved outcomes, because both clinicians and their patients would be safer when responding to epidemics, reducing the transmission of viruses, and allowing clinicians to provide patients with appropriate care because supplies are available.</p> <p>We proposed that this activity should be weighted as medium, because it may be accomplished by conducting a training, providing resources, or incorporating new procedures into a MIPS eligible clinician's practice. The estimated level of effort for MIPS eligible clinicians is comparable to other medium-weighted activities in the inventory, and less than that of high-weighted activities. See the definition of medium weighting in the CY 2019 PFS final rule (83 FR 59780 through 59781).</p>
Comments:	<p>A commenter recommended that this improvement activity be modified to focus more on planning for access to PPE rather than on replenishing PPE, because accessing PPE has been challenging at times during the COVID-19 public health emergency. Another commenter suggested that CMS finalize the activity as a high-weighted activity because of the impact of lack of PPE during the COVID-19 public health emergency, and because preparation for current and future pandemics is essential for healthcare workers.</p>
Response:	<p>We agree that planning for access to PPE is essential. This activity addresses both access to and replenishment of PPE as it requires a written plan for the acquisition, storage, maintenance, and replenishment of PPE as well as for preventing and preparing for a surge in the need for PPE in contingency and crisis scenarios.</p> <p>We agree with the commenter who noted the impact of inadequate PPE during the COVID_19 public health emergency and its importance to health care workers. As explained in section III.I.3.h.(4)(d)(i)(C) of the CY 2019 PFS final rule (83 FR 59780 through 59781) high weighting is used for those activities of high intensity, requiring significant investment of time and resources. We do not believe creating a PPE plan requires significant levels of resources and therefore, we do not believe a high weighting is warranted.</p>
Final Action:	After consideration of the public comments we received, we are finalizing this activity as proposed.
<b>Finalized Improvement Activity</b>	
Activity ID:	IA ERP 4
Subcategory:	Emergency Response and Preparedness
Activity Title:	Implementation of a Personal Protective Equipment (PPE) Plan



Activity Description:	<p>Implement a plan to acquire, store, maintain, and replenish supplies of personal protective equipment (PPE) for all clinicians or other staff who are in physical proximity to patients.</p> <p>In accordance with guidance from the Centers for Disease Control and Prevention (CDC) the PPE plan should address:</p> <ul style="list-style-type: none"> <li>• Conventional capacity: PPE controls that should be implemented in general infection prevention and control plans in healthcare settings, including training in proper PPE use.</li> <li>• Contingency capacity: actions that may be used temporarily during periods of expected PPE shortages.</li> <li>• Crisis capacity: strategies that may need to be considered during periods of known PPE shortages.</li> </ul> <p>The PPE plan should address all of the following types of PPE:</p> <ul style="list-style-type: none"> <li>• Standard precautions (e.g., hand hygiene, prevention of needle-stick or sharps injuries, safe waste management, cleaning and disinfection of the environment)</li> <li>• Eye protection</li> <li>• Gowns (including coveralls or aprons)</li> <li>• Gloves</li> <li>• Facemasks</li> <li>• Respirators (including N95 respirators)</li> </ul>
Weighting:	Medium
<b>New Improvement Activity</b>	
Proposed Activity ID:	IA ERP 5
Proposed Subcategory:	Emergency Response and Preparedness
Proposed Activity Title:	Implementation of a Laboratory Preparedness Plan
Proposed Activity Description:	<p>Develop, implement, update, and maintain a preparedness plan for a laboratory intended to support continued or expanded patient care during COVID-19 or another public health emergency. The plan should address how the laboratory would maintain or expand patient access to health care services to improve beneficiary health outcomes and reduce healthcare disparities.</p> <p>For laboratories without a preparedness plan, MIPS eligible clinicians would meet with stakeholders, record minutes, and document a preparedness plan, as needed. The laboratory must then implement the steps identified in the plan and maintain them.</p> <p>For laboratories with existing preparedness plans, MIPS eligible clinicians should review, revise, or update the plan as necessary to meet the needs of the current PHE, implement new procedures, and maintain the plan.</p> <p>Maintenance of the plan in this activity could include additional hazard assessments, drills, training, and/or developing checklists to facilitate execution of the plan. Participation in debriefings to evaluate the effectiveness of plans are additional examples of engagement in this activity.</p>
Proposed Weighting:	Medium
Rationale:	<p>The COVID-19 pandemic demonstrated a need for many laboratories to develop and implement protocols to respond to the public health emergencies, as an increase in demand (due to a surge in COVID testing) and reduced staffing (due to needing to maintain distancing and other factors, such as childcare becoming unavailable) compromised laboratory functioning.<sup>31</sup></p> <p>We believe that including this improvement activity in the inventory would encourage formalizing, updating, and maintaining preparedness plans to better equip laboratories to address another public health emergency, as well as other disasters such as floods, fires, or other emergencies. Such a plan will allow laboratory staff to respond and maintain operations during emergency situations. Thus, it has the potential to improve clinical practice or care delivery and is likely to result in improved outcomes, because if needed laboratory services increase with the surge in demand, staff will be prepared to meet those needs.</p> <p>We proposed weighting this activity medium, because this activity may be accomplished by developing a plan and training staff on that plan. The estimated level of effort for MIPS eligible clinicians is comparable to other medium-weighted activities in the inventory, and less than that of high-weighted activities. See the definition of medium weighting in the CY 2019 PFS final rule (83 FR 59780 through 59781).</p>

Comments:	Several commenters supported the addition of this improvement activity. One commenter urged CMS to finalize this improvement activity in order to expand the limited number of activities available to pathologists for reporting in this category.
Response:	We appreciate the support and would welcome the nomination of additional activities for pathologists and other non-patient facing clinicians.
Final Action:	After consideration of the public comments we received, we are finalizing this activity as proposed.
<b>Finalized Improvement Activity</b>	
<b>Activity ID:</b>	<b>IA ERP 5</b>
<b>Subcategory:</b>	Emergency Response and Preparedness
<b>Activity Title:</b>	Implementation of a Laboratory Preparedness Plan
<b>Activity Description:</b>	<p>Develop, implement, update, and maintain a preparedness plan for a laboratory intended to support continued or expanded patient care during COVID-19 or another public health emergency. The plan should address how the laboratory would maintain or expand patient access to health care services to improve beneficiary health outcomes and reduce healthcare disparities.</p> <p>For laboratories without a preparedness plan, MIPS eligible clinicians would meet with stakeholders, record minutes, and document a preparedness plan, as needed. The laboratory must then implement the steps identified in the plan and maintain them.</p> <p>For laboratories with existing preparedness plans, MIPS eligible clinicians should review, revise, or update the plan as necessary to meet the needs of the current PHE, implement new procedures, and maintain the plan.</p> <p>Maintenance of the plan in this activity could include additional hazard assessments, drills, training, and/or developing checklists to facilitate execution of the plan. Participation in debriefings to evaluate the effectiveness of plans are additional examples of engagement in this activity.</p>
<b>Weighting:</b>	Medium
<b>New Improvement Activity</b>	
<b>Proposed Activity ID:</b>	<b>IA PSPA 33</b>
<b>Proposed Subcategory:</b>	Patient Safety and Practice Assessment
<b>Proposed Activity Title:</b>	Application of CDC's Training for Healthcare Providers on Lyme Disease
<b>Proposed Activity Description:</b>	Apply the Centers for Disease Control and Prevention's (CDC) Training for Healthcare Providers on Lyme Disease using clinical decision support (CDS). CDS for Lyme disease should be built directly into the clinician workflow and support decision making for a specific patient at the point of care. Specific examples of how the guideline could be incorporated into a CDS workflow include but are not limited to: electronic health record (EHR) based prescribing prompts, order sets that require review of guidelines before prescriptions can be entered, and prompts requiring review of guidelines before a subsequent action can be taken in the record.
<b>Proposed Weighting:</b>	Medium
<b>Rationale:</b>	<p>Lyme disease has a high burden of disease, with approximately 476,000 cases diagnosed and treated annually. Additionally, the places where Lyme disease is common is expanding.<sup>32</sup></p> <p>We believe that including this improvement activity in the inventory would increase knowledge about Lyme disease. The CDC has developed a training course to support clinicians in identifying and treating Lyme disease, and this course will provide foundational knowledge to incorporate Lyme disease diagnosis and treatment into the workflow using CDS.<sup>33</sup> It has the potential to improve clinical practice and care delivery and is likely to result in improved outcomes; additional education to improve Lyme disease testing, ordering, and reporting systems are likely to improve patient care, reduce errors, and result in better Lyme disease-related outcomes.<sup>34 35 36</sup></p> <p>We proposed weighting this activity medium because this activity may be accomplished by conducting a training and incorporating new procedures into a MIPS eligible clinician's practice. The estimated level of effort for MIPS eligible clinicians is comparable to other medium-weighted activities in the inventory, and less than that of high-weighted activities. See the definition of medium weighting in the CY 2019 PFS final rule (83 FR 59780 through 59781).</p>
<b>Final Action</b>	We received no comments on this proposal; therefore, we are finalizing as proposed.
<b>Finalized Improvement Activity</b>	
<b>Activity ID:</b>	<b>IA PSPA 33</b>
<b>Subcategory:</b>	Patient Safety and Practice Assessment
<b>Activity Title:</b>	Application of CDC's Training for Healthcare Providers on Lyme Disease
<b>Activity Description:</b>	Apply the Centers for Disease Control and Prevention's (CDC) Training for Healthcare Providers on Lyme Disease using clinical decision support (CDS). CDS for Lyme disease



	should be built directly into the clinician workflow and support decision making for a specific patient at the point of care. Specific examples of how the guideline could be incorporated into a CDS workflow include but are not limited to: electronic health record (EHR) based prescribing prompts, order sets that require review of guidelines before prescriptions can be entered, and prompts requiring review of guidelines before a subsequent action can be taken in the record.
Weighting:	Medium

<sup>1</sup> U.S. Department of Health and Human Services. (2021). *CMS disparities impact statement*.

<https://www.cms.gov/About-CMS/Agency-Information/OMH/Downloads/Disparities-Impact-Statement-508-rev102018.pdf>.

<sup>2</sup> The White House. (2021). *Executive Order on advancing racial equity and support for underserved communities through the Federal Government*. <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/>.

<sup>3</sup> Jones, C. P. (2018). Toward the science and practice of anti-racism: Launching a national campaign against racism. *Ethnicity & Disease*, 28(Suppl 1), 231-234. [www.doi.org/10.18865/ed.28.S1.231](http://www.doi.org/10.18865/ed.28.S1.231).

<sup>4</sup> Centers for Disease Control and Prevention. (2021). *Racism and health*. <https://www.cdc.gov/healthequity/racism-disparities/index.html>.

<sup>5</sup> Feeding America. (2021). *The impact of the Coronavirus on food Insecurity in 2020 & 2021*. <https://www.feedingamerica.org/research/coronavirus-hunger-research>.

<sup>6</sup> Focus for Health. (2020). *Malnutrition in America*. <https://www.focusforhealth.org/malnutrition/>.

<sup>7</sup> Bowers, K. S., Francis, E., & Kraschnewski, J. L. (2018). The dual burden of malnutrition in the United States and the role of non-profit organizations. *Preventive Medicine Reports*, 12, 294-297. <https://doi.org/10.1016/j.pmedr.2018.10.002>.

<sup>8</sup> Malnutrition Quality Improvement Initiative. (2018). *Briefing: The value of quality malnutrition care*. <http://malnutritionquality.org/static/pdf/briefing-the-value-of-quality-malnutrition-care.pdf>.

<sup>9</sup> Gunderson, C. & Ziliak, J. P. (2015). Food insecurity and health outcomes. *Health Outcomes*, 34(11). <https://doi.org/10.1377/hlthaff.2015.0645>.

<sup>10</sup> Gallagher-Allred, C. R., Voss, A. C., Finn, S. C., & McCamish, M. A. (1996). Malnutrition and clinical outcomes: the case for medical nutrition therapy. *Journal of the American Dietetic Association*, 96(4), 361-368. [https://doi.org/10.1016/s0002-8223\(96\)00099-5](https://doi.org/10.1016/s0002-8223(96)00099-5).

<sup>11</sup> Malnutrition Quality Improvement Initiative. (2018). *Complete toolkit: A comprehensive guide to malnutrition quality improvement*. <https://malnutritionquality.org/wp-content/uploads/complete-mqi-toolkit.pdf>.

<sup>12</sup> Mabli, J., Ohls, J., Dragoset, L., Castner, L., & Santos, B. (2013). *Measuring the effect of Supplemental Nutrition Assistance Program (SNAP) participation on food security*. Food and Nutrition Service, U.S. Department of Agriculture. [www.fns.usda.gov/research-and-analysis](http://www.fns.usda.gov/research-and-analysis).

<sup>13</sup> Hopper, E. K., Bassuk, E. L., & Olivet, J. (2010). Shelter from the storm: Trauma-informed care in homelessness services settings. *The Open Health Services and Policy Journal*, 3, 82. <https://benthamopen.com/ABSTRACT/TOHSPJ-3-80>.

<sup>14</sup> DeCandia, C. J., & Guarino, K. (2015). Trauma-informed care: An ecological response. *Journal of Child and Youth Care Work*, 7, 7-32. [https://www.researchgate.net/profile/Dale\\_Curry/publication/327477528\\_Journal\\_of\\_Child\\_and\\_Youth\\_Care\\_Work\\_25\\_-\\_Trauma-Informed\\_Practice/links/5b917eb892851c78c4f3bf2f/Journal-of-Child-and-Youth-Care-Work-25-Trauma-Informed-Practice.pdf#page=7](https://www.researchgate.net/profile/Dale_Curry/publication/327477528_Journal_of_Child_and_Youth_Care_Work_25_-_Trauma-Informed_Practice/links/5b917eb892851c78c4f3bf2f/Journal-of-Child-and-Youth-Care-Work-25-Trauma-Informed-Practice.pdf#page=7).

<sup>15</sup> Hamberger, L. K., Barry, C., & Franco, Z. (2019). Implementing trauma-informed care in primary medical settings: Evidence-based rationale and approaches. *Journal of Aggression, Maltreatment & Trauma*, 28(4), 425-444. <https://doi.org/10.1080/10926771.2019.1572399>.

<sup>16</sup> Menschner, C., Maul, A., & Center for Health Care Strategies. (2016). *Key ingredients for successful trauma informed care implementation*. Robert Wood Johnson Foundation. <https://www.chcs.org/resource/key-ingredients-for-successful-trauma-informed-care-implementation/>.

<sup>17</sup> Substance Abuse and Mental Health Services Administration (SAMHSA). (2014). TIP 57: *Trauma-Informed Care in behavioral health services*. [https://store.samhsa.gov/product/TIP-57-Trauma-Informed-Care-in-Behavioral-Health-Services/SMA14-4816?referer=from\\_search\\_result](https://store.samhsa.gov/product/TIP-57-Trauma-Informed-Care-in-Behavioral-Health-Services/SMA14-4816?referer=from_search_result).

<sup>18</sup> U.S. Department of Veterans Affairs. (2019). *How common is PTSD in adults?* PTSD: National Center for PTSD. [https://www.ptsd.va.gov/understand/common/common\\_adults.asp](https://www.ptsd.va.gov/understand/common/common_adults.asp).

<sup>19</sup> DeAngelis, T. (2019). The legacy of trauma: An emerging line of research is exploring how historical and cultural traumas affect survivors' children for generations to come. *Monitor on Psychology*, 50(2). <https://www.apa.org/monitor/2019/02/legacy-trauma>.

<sup>20</sup> Substance Abuse and Mental Health Services Administration (SAMHSA). (2014). TIP 57: *Trauma-informed care in behavioral health services*. [https://store.samhsa.gov/product/TIP-57-Trauma-Informed-Care-in-Behavioral-Health-Services/SMA14-4816?referer=from\\_search\\_result](https://store.samhsa.gov/product/TIP-57-Trauma-Informed-Care-in-Behavioral-Health-Services/SMA14-4816?referer=from_search_result).



**Table B: Changes to Previously Adopted Improvement Activities for the CY 2022 Performance Period/ 2024 MIPS Payment Year and Future Years**

Current Improvement Activity	
Current Activity ID:	IA_AHE_1
Current Subcategory:	Achieving Health Equity
Current Activity Title:	Engagement of new Medicaid patients and follow-up
Current Activity Description:	Seeing new and follow-up Medicaid patients in a timely manner, including individuals dually eligible for Medicaid and Medicare. A timely manner is defined as within 10 business days for this activity.
Current Weighting:	Medium
Proposed Change and Rationale:	<p>This improvement activity was originally finalized in the CY 2017 Quality Payment Program final rule (81 FR 77825). The proposed modified activity would continue to address the important objective of providing timely care to Medicaid patients, but also expand the target population to include all patients who are underserved and may face barriers to timely access to appropriate care. We also proposed modifying the description so that, instead of stating patients should receive follow-up in a “timely manner,” defined as within 10 business days, clinicians would use their own time-to-treat data (i.e., data measuring the time between clinician identifying a need for an appointment and the patient having a scheduled appointment) to ensure that patients receive follow-up within standard guidelines and create, implement and monitor an approach for improvement in engagement in care. We wanted to broaden the description, because the amount of time that is clinically relevant for a follow up visit varies widely,<sup>1</sup> and therefore, setting a specific definition of “timely manner” may not be clinically appropriate for all patients. The proposed modification acknowledges this variation and encourages clinicians to use their own time-to-treat data and standard practice guidelines to enhance engagement.</p> <p>The proposed modified activity describes that this approach to improving engagement in care may include screening for treatment barriers, especially transportation barriers, and providing resources to patients who need assistance, including access to federally-mandated Medicaid transportation benefits. Lack of suitable transportation can pose a barrier to accessing needed care for many underserved patients—particularly for those who are elderly, disabled, or low-income.<sup>2</sup> As finalized in Federal regulation (42 CFR 431.53 and 440.170), Medicaid beneficiaries are eligible for the non-emergency medical transportation benefit, which assures transportation to and from non-emergency medical care for those without other options.<sup>3</sup> This activity is intended to encourage MIPS eligible clinicians to direct Medicaid beneficiaries and other underserved patients to access resources to reduce barriers to their timely access of needed care and ultimately help them achieve better health outcomes.</p> <p>We believe that participation in the modified version of this improvement activity would be more likely to result in improved outcomes, because it creates more flexibility around the timeline for follow-up by using time-to-treat data, specifies that these data guide an approach for patient engagement, and addresses a broader range of underserved populations.</p>
Proposed Revised Activity Title:	Enhance Engagement of Medicaid and Other Underserved Populations
Proposed Revised Activity Description:	To improve responsiveness of care for Medicaid and other underserved patients: use time-to-treat data (i.e., data measuring the time between clinician identifying a need for an appointment and the patient having a scheduled appointment) to identify patterns by which care or engagement with Medicaid patients or other groups of underserved patients has not achieved standard practice guidelines; and with this information, create, implement, and monitor an approach for improvement. This approach may include screening for patient barriers to treatment, especially transportation barriers, and providing resources to improve engagement (e.g., state Medicaid non-emergency medical transportation benefit).
Comments:	Many commenters expressed support for the proposed modifications to this improvement activity. One commenter expressed concern that the modifications would make the activity harder to implement. The commenter believed that expanding the population would increase the burden for reporting and documenting by requiring that a MIPS eligible clinician ask patients sensitive questions about income and family. They also suggested that the modification’s proposed expanded patient population may make it more difficult to filter records to identify targeted patients. For these reasons, they suggested CMS amend the definition of the applicable patient population defined in this activity. The commenter also expressed concern about changing the definition of timeliness, because the broader definitions for timeliness and population seem to require more complex analysis to identify trends in care and engagement.
Response:	We appreciate the commenters’ support. We would like to clarify that expanding the population to all underserved populations would simply allow a MIPS eligible clinician to select and target an underserved community relevant to their practice. Targeting a patient population of their choice would enable them to determine the data they would need to collect and analysis they



	<p>would need to perform to allow them to adequately meet the requirements of this activity, within the confines of their practice's resources and interests. One may focus on Medicaid beneficiaries, while another may select a different underserved community.</p> <p>Regarding the commenter's preference for the original threshold of 10 days for determining timeliness: as stated above, the amount of time that is clinically relevant for a follow up visit varies widely, and any given specific definition of "timely manner" may not be clinically appropriate for all patients. However, if a MIPS eligible clinician believes that the 10-day threshold for timeliness is clinically appropriate, they could still apply it to their time-to-treat data for a specific target population to identify timeliness issues in delivering care. Given the flexibility for a MIPS eligible clinician to define their population of interest and their time-to-treat threshold, we do not believe this modification increases burden or complexity of analysis to identify patients or trends in care and engagement.</p>
Final Action:	After consideration of the public comments we received, we are finalizing this activity as proposed.
<b>Finalized Improvement Activity</b>	
Activity ID:	<b>IA_AHE_1</b>
Subcategory:	Achieving Health Equity
Activity Title:	Enhance Engagement of Medicaid and Other Underserved Populations
Activity Description:	To improve responsiveness of care for Medicaid and other underserved patients: use time-to-treat data (i.e., data measuring the time between clinician identifying a need for an appointment and the patient having a scheduled appointment) to identify patterns by which care or engagement with Medicaid patients or other groups of underserved patients has not achieved standard practice guidelines; and with this information, create, implement, and monitor an approach for improvement. This approach may include screening for patient barriers to treatment, especially transportation barriers, and providing resources to improve engagement (e.g., State Medicaid non-emergency medical transportation benefit).
Weighting:	Medium
<b>Current Improvement Activity</b>	
Current Activity ID:	<b>IA_AHE_5</b>
Current Subcategory:	Achieving Health Equity
Current Activity Title:	MIPS Eligible Clinician Leadership in Clinical Trials or Community-Based Participatory Research (CBPR)
Current Activity Description:	MIPS eligible clinician leadership in clinical trials, research alliances or community-based participatory research (CBPR) that identify tools, research or processes that can focus on minimizing disparities in healthcare access, care quality, affordability, or outcomes.
Current Weighting:	Medium
Proposed Change and Rationale:	<p>This improvement activity was originally finalized in the CY 2018 Quality Payment Program final rule (82 FR 54175). The proposed modification would add as an explicit option that the research could focus on addressing health-related social needs as drivers of health. Risks for health-related social needs are more acute and widespread in underserved communities.<sup>4</sup> These risks are linked to worse health outcomes and addressing them can reduce costs.<sup>5</sup> The modification would also change verbiage in ways that clarify the activity, but do not affect the intent of the activity.</p> <p>The health-related social needs included in the proposed modification are aligned with our Accountable Health Communities (AHC) Model (<a href="https://innovation.cms.gov/innovation-models/ahcm">https://innovation.cms.gov/innovation-models/ahcm</a>), which looks at the impact of identifying and addressing patients' health-related social needs on their health outcomes. AHC has prioritized five areas of health-related social needs, namely: food insecurity, housing insecurity, transportation, utilities, and interpersonal safety.<sup>6</sup> These areas were selected as priority, because there is high-quality evidence linking it with poor health or increased health care utilization and cost, there are community providers who can help meet the need, and health care providers are not yet comprehensively screening for or addressing these needs.<sup>7</sup> We proposed to modify this improvement activity to identify the same five health-related social needs prioritized in the AHC Model as potential areas of research.</p> <p>Criteria for selecting new improvement activities, which we finalized in section IV.A.3.d.(3)(c)(i) of this final rule, align with those used for prioritizing health-related social needs. With this modification, this improvement activity would become more explicitly a part of our plan to help clinicians provide patient-centered care to patients who have complex and multi-faceted needs. We believe that participation in the modified version of this improvement activity would be more likely to result in improved outcomes, because it explicitly includes research into health-related social needs, which are central to understanding and addressing disparities in achieving positive health outcomes. We believe that we would achieve the objectives of the Quality Payment Program—specifically, to improve beneficiary population health, to improve the care received by Medicare beneficiaries, and to lower costs to the Medicare program—by helping address health-related social needs.</p>



Proposed Revised Activity Description:	Lead clinical trials, research alliances, or community-based participatory research (CBPR) that identify tools, research, or processes that focus on minimizing disparities in healthcare access, care quality, affordability, or outcomes. Research could include addressing health-related social needs like food insecurity, housing insecurity, transportation barriers, utility needs, and interpersonal safety.
Comments:	One commenter was supportive of improvement activity modifications that addressed using data to address disparities in health equity, for example, gathering and analyzing data by race and documenting disparities by different population groups. The commenter recommended that when implementing such modifications, CMS should ensure that such modifications do not alter the core intent of the activity.
Response:	We thank the commenter for this input and agree with this approach. When modifying several improvement activities to include collecting and analyzing population-level data, including health-related social needs, our intent is to highlight opportunities to strengthen core activities to close health equity gaps using a data-informed approach. This activity's modification includes an option, not a requirement, to address health-related social needs as part of research activities.
Final Action:	After consideration of the public comments we received, we are finalizing this activity as proposed.
<b>Finalized Improvement Activity</b>	
Activity ID:	IA_AHE_5
Subcategory:	Achieving Health Equity
Activity Title:	MIPS Eligible Clinician Leadership in Clinical Trials or Community-Based Participatory Research (CBPR)
Activity Description:	Lead clinical trials, research alliances, or community-based participatory research (CBPR) that identify tools, research, or processes that focus on minimizing disparities in healthcare access, care quality, affordability, or outcomes. Research could include addressing health-related social needs like food insecurity, housing insecurity, transportation barriers, utility needs, and interpersonal safety.
Weighting:	Medium
<b>Current Improvement Activity</b>	
Current Activity ID:	IA_BE_1
Current Subcategory:	Beneficiary Engagement
Current Activity Title:	Use of certified EHR to capture patient reported outcomes
Current Activity Description:	In support of improving patient access, performing additional activities that enable capture of patient reported outcomes (e.g., home blood pressure, blood glucose logs, food diaries, at-risk health factors such as tobacco or alcohol use, etc.) or patient activation measures through use of certified EHR technology, containing this data in a separate queue for clinician recognition and review.
Current Weighting:	Medium
Proposed Change and Rationale:	<p>This improvement activity was originally finalized in the CY 2017 Quality Payment Program final rule (81 FR 77825). We proposed to modify the activity by replacing examples of patient reported outcomes with current industry standards—functional status, symptoms and symptom burden, health behaviors, and patient experience.</p> <p>We also proposed to include a definition for patient activation<sup>8</sup>—measures of patient involvement in their care -- to improve clarity of the activity.</p> <p>Finally, we also proposed to simplify the wording in ways that clarify the activity but do not affect the purpose. These proposed modifications would improve the accuracy, applicability, and clarity of the activity. We believe that participation in the modified version of this improvement activity would be more likely to result in improved outcomes, because it promotes clarity by providing more accurate and current industry standard patient reported outcomes.</p>
Proposed Revised Activity Description:	To improve patient access, perform activities beyond routine care that enable capture of patient reported outcomes (for example, related to functional status, symptoms and symptom burden, health behaviors, or patient experience) or patient activation measures (that is, measures of patient involvement in their care) through use of certified electronic health record technology, and record these outcomes data for clinician review.
Final Action:	We received no comments on this proposal; therefore, we are finalizing as proposed.
<b>Finalized Improvement Activity</b>	
Activity ID:	IA_BE_1
Subcategory:	Beneficiary Engagement
Activity Title:	Use of certified EHR to capture patient reported outcomes
Activity Description:	To improve patient access, perform activities beyond routine care that enable capture of patient reported outcomes (for example, related to functional status, symptoms and symptom burden, health behaviors, or patient experience) or patient activation measures (that is, measures of patient involvement in their care) through use of certified electronic health record technology, and record these outcomes data for clinician review.



Weighting:	Medium
<b>Current Improvement Activity</b>	
Current Activity ID:	IA_BE_6
Current Subcategory:	Beneficiary Engagement
Current Activity Title:	Collection of and follow-up on patient experience and satisfaction data on beneficiary engagement
Current Activity Description:	Collection of and follow-up on patient experience and satisfaction data on beneficiary engagement, including development of improvement plan.
Current Weighting:	High
Proposed Change and Rationale:	<p>This improvement activity was originally finalized in the CY 2017 Quality Payment Program final rule (81 FR 77825). We proposed to combine multiple activities into this IA_BE_6 improvement activity to remove overlapping content and improve the applicability and ease of use.</p> <p>In addition to this activity, the previously adopted BE_13 (81 FR 77825) and PSPA_11 (81 FR 77825) improvement activities also require the collection of patient experience and satisfaction data with the objective of increasing patient-centeredness of care. The previously adopted activity descriptions are as follows:</p> <ul style="list-style-type: none"> <li>• IA_BE_13: Regularly assess the patient experience of care through surveys, advisory councils and/or other mechanisms.</li> <li>• IA_PSPA_11: Participation in the Consumer Assessment of Healthcare Providers and Systems Survey (CAHPS) or other supplemental questionnaire items (e.g., Cultural Competence or Health Information Technology supplemental item sets)</li> </ul> <p>We proposed to modify IA_BE_6 to include additional detail covering the unique content of IA_BE_13 and IA_PSPA_11. Specifically, we proposed to add surveys such as CAHPS, advisory councils, and other mechanisms in the modified version of BE_6 as options for tools used for collecting the patient experience data.</p> <p>We also proposed to update the title of the improvement activity to better reflect the full scope of the revised activity description.</p> <p>We also proposed to add language that will encourage MIPS eligible clinicians to consider the linguistic needs of their population, so that the satisfaction survey results could include the perspectives of patient groups who may not feel comfortable taking a survey in English.</p>
Proposed Revised Title:	Regularly Assess Patient Experience of Care and Follow Up on Findings
Proposed Revised Activity Description:	Collect and follow up on patient experience and satisfaction data. This activity also requires follow-up on findings of assessments, including the development and implementation of improvement plans. To fulfill the requirements of this activity, MIPS eligible clinicians can use surveys (e.g., Consumer Assessment of Healthcare Providers and Systems Survey), advisory councils, or other mechanisms. MIPS eligible clinicians may consider implementing patient surveys in multiple languages, based on the needs of their patient population.
Final Action:	We received no comments on this proposal; therefore, we are finalizing as proposed.
<b>Finalized Improvement Activity</b>	
Activity ID:	IA_BE_6
Subcategory:	Beneficiary Engagement
Activity Title:	Regularly Assess Patient Experience of Care and Follow Up on Findings
Activity Description:	Collect and follow up on patient experience and satisfaction data. This activity also requires follow-up on findings of assessments, including the development and implementation of improvement plans. To fulfill the requirements of this activity, MIPS eligible clinicians can use surveys (e.g., Consumer Assessment of Healthcare Providers and Systems Survey), advisory councils, or other mechanisms. MIPS eligible clinicians may consider implementing patient surveys in multiple languages, based on the needs of their patient population.
Weighting:	High
<b>Current Improvement Activity</b>	
Current Activity ID:	IA_BE_16
Current Subcategory:	Beneficiary Engagement
Current Activity Title:	Evidenced-based techniques to promote self-management into usual care
Current Activity Description:	Incorporate evidence-based techniques to promote self-management into usual care, using techniques such as goal setting with structured follow-up, Teach Back, action planning or motivational interviewing.
Current Weighting:	Medium
Proposed Change and Rationale:	This improvement activity was originally finalized in the CY 2017 Quality Payment Program final rule (81 FR 77825). We proposed to combine this IA_BE_16 with the previously adopted IA_BE_17, IA_BE_18, IA_BE_20, and IA_BE_21 because of overlapping and duplicative content and to improve the applicability and ease of use of the inventory. The above previously



	<p>adopted improvement activities included effective interventions for helping patients better engage in self-management. The previously adopted activity descriptions are as follows:</p> <ul style="list-style-type: none"> <li>• IA_BE_17: Use tools to assist patients in assessing their need for support for self-management (e.g., the Patient Activation Measure or “How’s My Health”). (81 FR 77825)</li> <li>• IA_BE_18: Provide peer-led support for self-management. (81 FR 77825)</li> <li>• IA_BE_20: Provide condition-specific chronic disease self-management support programs or coaching or link patients to those programs in the community. (81 FR 77825)</li> <li>• IA_BE_21: Provide self-management materials at an appropriate literacy level and in an appropriate language. (81 FR 77825)</li> </ul> <p>We proposed to change IA_BE_16 to include additional detail covering the unique content of IA_BE_17, IA_BE_18, IA_BE_20, and IA_BE_21. Specifically, we proposed to add tools for self-management, peer-led support, provision of self-management materials, and retain the examples of evidence-based approaches patients may use to better engage in self-management included in the original IA_BE_16: goal setting with structured follow-up,<sup>9</sup> Teach-back methods,<sup>10</sup> action planning,<sup>11</sup> assessment of need for self-management (for example, the Patient Activation Measure<sup>12</sup>), and motivational interviewing<sup>13</sup> as options for tools and resources to provide patients as part of fulfilling the requirements for the activity. These tools and techniques could be particularly helpful for people with substance use disorders and individuals managing chronic physical conditions such as diabetes and heart disease<sup>14</sup>.</p> <p>We also proposed to add that evidence-based techniques for promoting self-management should be culturally and linguistically tailored.</p>
Proposed Revised Activity Title:	Promote Self-management in Usual Care
Proposed Revised Activity Description:	To help patients self-manage their care, incorporate culturally and linguistically tailored evidence-based techniques for promoting self-management into usual care, and provide patients with tools and resources for self-management. Examples of evidence-based techniques to use in usual care include: goal setting with structured follow-up, Teach-back methods, action planning, assessment of need for self-management (for example, the Patient Activation Measure), and motivational interviewing. Examples of tools and resources to provide patients directly or through community organizations include: peer-led support for self-management, condition-specific chronic disease or substance use disorder self-management programs, and self-management materials.
Final Action:	We received no comments on this proposal; therefore, we are finalizing as proposed.
<b>Finalized Improvement Activity</b>	
Activity ID:	IA_BE_16
Subcategory:	Beneficiary Engagement
Activity Title:	Promote Self-management in Usual Care
Activity Description:	To help patients self-manage their care, incorporate culturally and linguistically tailored evidence-based techniques for promoting self-management into usual care, and provide patients with tools and resources for self-management. Examples of evidence-based techniques to use in usual care include: goal setting with structured follow-up, Teach-back methods, action planning, assessment of need for self-management (for example, the Patient Activation Measure), and motivational interviewing. Examples of tools and resources to provide patients directly or through community organizations include: peer-led support for self-management, condition-specific chronic disease or substance use disorder self-management programs, and self-management materials.
Weighting:	Medium
<b>Current Improvement Activity</b>	
Current Activity ID:	IA_BE_25
Current Subcategory:	Beneficiary Engagement
Current Activity Title:	Drug Cost Transparency
Current Activity Description:	To receive credit for this improvement activity, MIPS eligible clinicians must attest that their practice provides counseling to patients and/or their caregivers about the costs of drugs and the patients’ out-of-pocket costs for the drugs. If appropriate, the MIPS eligible clinician must also explore with their patients the availability of alternative drugs and patients’ eligibility for patient assistance programs that provide free medications to people who cannot afford to buy their medicine. One source of information for pricing of pharmaceuticals could be a real-time benefit tool (RTBT), which provides to the prescriber, real-time patient-specific formulary and benefit information for drugs, including cost-sharing for a beneficiary. (CMS finalized in the Modernizing Part D and Medicare Advantage to Lower Drug Prices and Reduce Out of Pocket Expenses final rule (84 FR 23832, 23883) that beginning January 1, 2021 Medicare Part D plans will be required to implement one or more RTBT(s).)
Current Weighting:	High



Proposed Change and Rationale:	<p>This improvement activity was originally finalized in the CY 2020 PFS final rule (84 FR 63539). In the CY 2020 PFS final rule (84 FR 63515), we adopted IA_BE_25, titled "Drug Cost Transparency to include requirements for use of real-time benefit tools" beginning with the 2020 performance year and for subsequent years. It allows a real-time benefit tool (RTBT) to be one source of information for pricing of pharmaceuticals, which provides to the prescriber real-time patient-specific formulary and benefit information for drugs, including cost-sharing for a beneficiary.</p> <p>The 2021 Consolidated Appropriations Act (H.R. 116-133, Pub. L. 116-260) subtitle B included section 119 "Increasing the use of real-time benefit tools to lower beneficiary costs" subsection (c) "Inclusion of Use of Real-Time Electronic Information in Shared Decision-Making Under MIPS" amended section 1848(q)(2)(B)(iii)(IV) of the Act by adding at the end the following new sentences: "This subcategory shall include as an activity, for performance periods beginning on or after January 1, 2022, use of a real-time benefit tool as described in section 1860D-4(o). The Secretary may establish this activity as a standalone or as a component of another activity."</p> <p>In response to this amendment, in the proposed rule, we proposed to modify this improvement activity such that beginning with the CY 2022 performance period/2024 MIPS payment year and for subsequent years the activity will require use of RTBT. As previously finalized, use of RTBT was optional.</p> <p>We also proposed to update the description in ways that clarify the activity, but do not affect the intent of the activity.</p> <p>We believe that requiring RTBT will make this activity more likely to reduce the costs of care. As explained in the CY 2019 Modernizing Part D final rule (84 FR 23832), RTBTs that are integrated with at least one prescriber's e-prescribing and electronic medical record systems can make beneficiary-specific drug coverage and cost information visible to prescribers. Using RTBT thus allows the prescriber and patient, when appropriate, to choose among clinically acceptable alternatives while weighing costs. By making RTBT a requirement, this modification will also require prescribers to look for alternative drugs, in contrast to the existing activity where such comparisons are optional. We believe that furthering prescription price transparency is critical to lowering overall drug costs and patients' out-of-pocket costs and improving medication adherence. Additionally, it could help advance efforts to improve patient safety, quality of care, and efficiencies and cost savings in the delivery of care.</p>
Proposed Revised Activity Description:	Provide counseling to patients and/or their caregivers regarding: costs of medications using a real time benefit tool (RTBT) which provides to the prescriber real-time patient-specific formulary and benefit information for drugs, including cost-sharing for a beneficiary.
Comments:	One commenter recommended that the use of a RTBT remain optional to meet the requirements for this activity given the variation in practices' access to RTBT.
Response:	The modification to this improvement activity was proposed to satisfy the requirement of the 2021 Consolidated Appropriations Act (H.R. 116-133, Pub. L. 116-260), which provides that the Improvement Activity performance category include a new or modified activity that requires use of RTBT. We chose to combine this requirement with an existing activity about RTBT because we viewed the CAA amendment as an opportunity to further advance patient counseling regarding drug cost. Requiring the use of RTBT would make this activity more likely to reduce the costs of care for patients. Moreover, MIPS eligible clinicians with delayed access to RTBT can choose appropriate improvement activities from over 100 activities in the inventory, until their access issues are resolved.
Final Action:	After consideration of the public comments we received, we are finalizing our CY 2022 performance period/2024 MIPS payment year proposal to modify IA_BE_25 without modification.
<b>Finalized Improvement Activity</b>	
Activity ID:	IA_BE_25
Subcategory:	Beneficiary Engagement
Activity Title:	Drug Cost Transparency
Activity Description:	Provide counseling to patients and/or their caregivers regarding: costs of medications using a real time benefit tool (RTBT) which provides to the prescriber real-time patient-specific formulary and benefit information for drugs, including cost-sharing for a beneficiary.
Current Weighting:	High
<b>Current Improvement Activity</b>	
Current Activity ID:	IA_CC_14
Current Subcategory:	Care Coordination
Current Activity Title:	Practice improvements that engage community resources to support patient health goals
Current Activity Description:	<p>Develop pathways to neighborhood/community-based resources to support patient health goals that could include one or more of the following:</p> <ul style="list-style-type: none"> <li>• Maintain formal (referral) links to community-based chronic disease self-management</li> </ul>



	<p>support programs, exercise programs and other wellness resources with the potential for bidirectional flow of information; and provide a guide to available community resources.</p> <ul style="list-style-type: none"> <li>• Including through the use of tools that facilitate electronic communication between settings;</li> <li>• Screen patients for health-harming legal needs;</li> <li>• Screen and assess patients for social needs using tools that are preferably health IT enabled and that include to any extent standards-based, coded question/field for the capture of data as is feasible and available as part of such tool; and/or</li> <li>• Provide a guide to available community resources.</li> </ul>
Current Weighting:	Medium
Proposed Change and Rationale:	<p>This improvement activity was originally finalized in the CY 2017 Quality Payment Program final rule (81 FR 77825). The previously adopted improvement activity includes screening as one option to assess patients specifically for social and legal needs. We proposed to modify this improvement activity to instead require screening for a range of health-related social needs using evidence-based tools before and in addition to supporting connections to community resources. We believe that screening patients using evidence-based tools could help clinicians adopt a more systematic approach to addressing health related social needs among their patient population, including effective documentation and follow-up, and avoid missing patients who have such needs. Including screening in addition to supporting connections to community resources, represents a continuum of support that clinicians can provide to patients from within the health system.</p> <p>We also proposed to remove the promotion of systems for communication that have the “potential for bi-directional flow of information” and the option for using “tools that facilitate electronic communication between settings.” In many communities, the resources and programs that might best provide patients who have health-related social needs with support may not have the baseline technological capacity to engage with clinician groups in ways that eclipse basic forms of communication like phone and email.</p> <p>We also proposed to add an option for using electronic health records to document screening results, trigger follow-up, and analyze data to better tailor approaches. For practices that already have processes for enabling connections to community resources established, this option would allow continued improvement and provision of more streamlined and systematized support to patients in need.</p> <p>The specific set of health-related social needs that clinicians might choose to prioritize remains part of the improvement activity, as does examples that were previously mentioned in the activity—for example, health-related legal needs. We believe that participation in the modified version of this improvement activity would be more likely to result in improved outcomes, because it requires MIPS eligible clinicians to both screen for and address health related social needs, which are major contributors to health care access and health outcomes.</p> <p>In light of the above list of proposed changes in this modification, we also proposed to increase the weight for this activity from medium to high. Specifically, the modifications would require screening in addition to an activity that links patients to community resources. Previously, the activity required screening <i>or</i> linkages to community. Conducting screening then devoting clinical staff time to using that data to identify and disseminate appropriate community resource information to patients takes considerable time and resources. We proposed to increase the weight for this activity from medium to high to reflect the additional effort required, per high-weight criteria finalized in the CY 2019 PFS final rule (83 FR 59780 through 59781).</p>
Proposed New Weighting:	High
Proposed Revised Activity Description:	<p>Select and screen for the health-related social needs (HRSN) that are relevant for your patient population using tools that have been tested with underserved populations. If possible, use a screening tool that is health IT-enabled and includes standards-based, coded question/field for the capture of data. After screening, address HRSNs identified through at least one of the following:</p> <ul style="list-style-type: none"> <li>• Update a guide to available community resources and provide it to patients who are found to be at risk in one or more HRSN area;</li> <li>• Maintain formal (referral) links to key community resources and programs to strengthen the referral process, implementing closed-loop referrals where feasible; or</li> <li>• Record findings of screening and trigger follow-up within the electronic health record (EHR); then analyze EHR data on patients with one or more HRSN needed to identify and implement approaches to better serve their holistic needs through linkages with community resources.</li> </ul>



	HRSNs prioritized by your practice might include health-harming legal needs, which require both health and legal support to resolve, areas such as food and housing insecurity, or needs such as exercise, nutrition, or chronic disease self-management.
Comments:	One commenter was supportive of improvement activity modifications that address using data to address disparities in health equity, e.g., gathering and analyzing data by race and documenting disparities by different population groups. The commenter recommended that when implementing such modifications, CMS ensures that such modifications do not alter the core intent of the activity. We also received feedback suggesting CMS modify the activity description to reflect that a MIPS eligible clinician should maintain relationships with community-based organizations to strengthen community service referrals to HRSN, especially for underserved populations. They suggested CMS could emphasize this point by placing this bullet first in the activity description. They believed these edits were needed to underscore the importance of leveraging the experience of and relationships with community-based organizations to connect patients to community services to address HRSN. They also suggested we modify the activity to specify that in addition to updating a guide to community resources, a MIPS eligible clinician could work with community partners to provide a community resource guide. They explain this addition would highlight the option for community organizations to share existing resource guides with patients found to be at risk for HRSN, via the MIPS eligible clinician.
Response:	We thank the commenter for this input and agree with this approach. When modifying several improvement activities to include collecting and analyzing population-level data including health-related social needs, our intent is to highlight opportunities to strengthen core activities to close health equity gaps using a data-informed approach. This activity's modification adds a requirement to screen patients for health-related social needs, which may rely on population-level data analysis. The intent of this modification is to help MIPS eligible clinicians adopt a more systematic approach to referring patients to community-based resources without altering the core intent of the activity. We also agree with the feedback regarding modifying the language of this activity to emphasize the importance of relationships between a MIPS eligible clinician and community-based organizations to strengthen community service referrals, and to include the option for community partners to share existing resource guides related to HRSN areas. We also agree to include these options for completing this activity in this order, involving a switch of the current second bullet to become the first.
Final Action:	After consideration of the public comments we received, we are modifying this activity by moving the current second bullet first and by editing the language to refer to a relationship between a MIPS eligible clinician and community-based organizations and to specify that they strengthen referrals to community services; and to include the option for community partners to share existing resource guides.
<b>Finalized Improvement Activity</b>	
Activity ID:	IA_CC_14
Subcategory:	Care Coordination
Activity Title:	Practice improvements that engage community resources to support patient health goals
Activity Description:	<p>Select and screen for the health-related social needs (HRSN) that are relevant for your patient population using tools that have been tested with underserved populations. If possible, use a screening tool that is health IT-enabled and includes standards-based, coded question/field for the capture of data. After screening, address HRSNs identified through at least one of the following:</p> <ul style="list-style-type: none"> <li>• Maintain formal relationships with community-based organizations to strengthen the community service referral process, implementing closed-loop referrals where feasible; or</li> <li>• Update a guide to available community resources, or work with community partners to provide a community resource guide and provide it to patients who are found to be at risk in one or more HRSN area; or</li> <li>• Record findings of screening and trigger follow-up within the electronic health record (EHR); then analyze EHR data on patients with one or more HRSN needed to identify and implement approaches to better serve their holistic needs through linkages with community resources.</li> </ul> <p>HRSNs prioritized by your practice might include health-harming legal needs, which require both health and legal support to resolve, areas such as food and housing insecurity, or needs such as exercise, nutrition, or chronic disease self-management.</p>
Weighting:	High
<b>Current Improvement Activity</b>	
Current Activity ID:	IA_CC_15
Current Subcategory:	Care Coordination
Current Activity Title:	PSH Care Coordination
Current Activity Description:	Participation in a Perioperative Surgical Home (PSH) that provides a patient-centered, physician-led, interdisciplinary, and team-based system of coordinated patient care, which coordinates care from pre-procedure assessment through the acute care episode, recovery, and post-acute care.



	<p>This activity allows for reporting of strategies and processes related to care coordination of patients receiving surgical or procedural care within a PSH. The MIPS eligible clinician must perform one or more of the following care coordination activities:</p> <ul style="list-style-type: none"> <li>• Coordinate with care managers/navigators in preoperative clinic to plan and implementation comprehensive post discharge plan of care;</li> <li>• Deploy perioperative clinic and care processes to reduce post-operative visits to emergency rooms;</li> <li>• Implement evidence-informed practices and standardize care across the entire spectrum of surgical patients; or</li> <li>• Implement processes to ensure effective communications and education of patients' post-discharge instructions.</li> </ul>
Current Weighting:	Medium
Proposed Change and Rationale:	<p>This improvement activity was originally finalized in the CY 2018 Quality Payment Program final rule (82 FR 54175). We proposed to increase the weight for this activity from medium to high, because it came to our attention that the level of effort to complete this activity was better aligned to our high-weight criteria, which specifies that high-weight activities reflect high intensity activities, requiring significant investment of time and resources. This activity requires team-based, interdisciplinary care coordinated across multiple care settings and requires efforts to both plan for and implement the selected care coordination actions. We note that the activity description will remain the same.</p>
Proposed New Weighting:	High
Final Action:	We received no comments on this proposal; therefore, we are finalizing as proposed.
<b>Finalized Improvement Activity</b>	
Activity ID:	<b>IA_CC_15</b>
Subcategory:	Care Coordination
Activity Title:	PSH Care Coordination
Activity Description:	<p>Participation in a Perioperative Surgical Home (PSH) that provides a patient-centered, physician-led, interdisciplinary, and team-based system of coordinated patient care, which coordinates care from pre-procedure assessment through the acute care episode, recovery, and post-acute care. This activity allows for reporting of strategies and processes related to care coordination of patients receiving surgical or procedural care within a PSH. The MIPS eligible clinician must perform one or more of the following care coordination activities:</p> <ul style="list-style-type: none"> <li>• Coordinate with care managers/navigators in preoperative clinic to plan and implementation comprehensive post discharge plan of care;</li> <li>• Deploy perioperative clinic and care processes to reduce post-operative visits to emergency rooms;</li> <li>• Implement evidence-informed practices and standardize care across the entire spectrum of surgical patients; or</li> <li>• Implement processes to ensure effective communications and education of patients' post-discharge instructions.</li> </ul>
Weighting:	High
<b>Current Improvement Activity</b>	
Current Activity ID:	<b>IA_EPA_1</b>
Current Subcategory:	Expanded Practice Access
Current Activity Title:	Provide 24/7 Access to MIPS Eligible Clinicians or Groups Who Have Real-Time Access to Patient's Medical Record
Current Activity Description:	<p>Provide 24/7 access to MIPS eligible clinicians, groups, or care teams for advice about urgent and emergent care (e.g., MIPS eligible clinician and care team access to medical record, cross-coverage with access to medical record, or protocol-driven nurse line with access to medical record) that could include one or more of the following:</p> <ul style="list-style-type: none"> <li>• Expanded hours in evenings and weekends with access to the patient medical record (e.g., coordinate with small practices to provide alternate hour office visits and urgent care);</li> <li>• Use of alternatives to increase access to care team by MIPS eligible clinicians and groups, such as e-visits, phone visits, group visits, home visits and alternate locations (e.g., senior centers and assisted living centers); and/or</li> <li>• Provision of same-day or next-day access to a consistent MIPS eligible clinician, group or care team when needed for urgent care or transition management.</li> </ul>
Current Weighting:	High
Proposed Change and Rationale:	<p>This improvement activity was originally finalized in the CY 2017 Quality Payment Program final rule (81 FR 77825). We proposed to remove references to a "consistent" MIPS eligible clinician, group or care team, because the requirement for a consistent clinician was unclear and unnecessary to achieve the activity's objectives.</p> <p>We also proposed to limit the scope of the activity to "urgent care" only rather than both "urgent</p>



	<p>and emergent care," because emergent care would only require the activity's interventions when also urgent. We believe that participation in the modified version of this improvement activity would be more likely to result in improved outcomes, because the improved clarity will promote expanded access to MIPS eligible clinicians in urgent care settings.</p> <p>We believe that these modifications help clarify the nature and intent of this activity, and thus would help clinicians selecting it to improve access to care for their patients.</p>
Proposed Revised Activity Description:	<p>Provide 24/7 access to MIPS eligible clinicians, groups, or care teams for advice about urgent care (e.g., MIPS eligible clinician and care team access to medical record, cross-coverage with access to medical record, or protocol-driven nurse line with access to medical record) that could include one or more of the following:</p> <ul style="list-style-type: none"> <li>Expanded hours in evenings and weekends with access to the patient medical record (e.g., coordinate with small practices to provide alternate hour office visits and urgent care);</li> <li>Use of alternatives to increase access to care team by MIPS eligible clinicians and groups, such as e-visits, phone visits, group visits, home visits and alternate locations (e.g., senior centers and assisted living centers); and/or</li> <li>Provision of same-day or next-day access to a MIPS eligible clinician, group or care team when needed for urgent care or transition management.</li> </ul>
Final Action:	We received no comments on this proposal; therefore, we are finalizing as proposed.
<b>Finalized Improvement Activity</b>	
Activity ID:	<b>IA_EPA_1</b>
Subcategory:	Expanded Practice Access
Activity Title:	Provide 24/7 Access to MIPS Eligible Clinicians or Groups Who Have Real-Time Access to Patient's Medical Record
Activity Description:	<p>Provide 24/7 access to MIPS eligible clinicians, groups, or care teams for advice about urgent care (e.g., MIPS eligible clinician and care team access to medical record, cross-coverage with access to medical record, or protocol-driven nurse line with access to medical record) that could include one or more of the following:</p> <ul style="list-style-type: none"> <li>Expanded hours in evenings and weekends with access to the patient medical record (e.g., coordinate with small practices to provide alternate hour office visits and urgent care);</li> <li>Use of alternatives to increase access to care team by MIPS eligible clinicians and groups, such as e-visits, phone visits, group visits, home visits and alternate locations (e.g., senior centers and assisted living centers); and/or</li> <li>Provision of same-day or next-day access to a MIPS eligible clinician, group or care team when needed for urgent care or transition management.</li> </ul>
Weighting:	High
<b>Current Improvement Activity</b>	
Current Activity ID:	<b>IA_EPA_2</b>
Current Subcategory:	Expanded Practice Access
Current Activity Title:	Use of telehealth services that expand practice access
Current Activity Description:	Use of telehealth services and analysis of data for quality improvement, such as participation in remote specialty care consults or teleaudiology pilots that assess ability to still deliver quality care to patients.
Current Weighting:	Medium
Proposed Change and Rationale:	<p>This improvement activity was originally finalized in the CY 2017 QPP final rule (81 FR 77825). We proposed to shift the focus of the activity to developing standardized approaches for telehealth in their daily practice and away from the analysis of data to evaluate effectiveness. This proposed shift retains the objective of the original activity, namely, of improving health outcomes for patients utilizing telehealth services. We believe this proposed shift makes the activity more relevant, because while telehealth has become a routine part of health care during the COVID-19 pandemic and is perceived as effective by clinicians and patients, clinicians may not have implemented it in a standardized manner or as widely as possible due to the rapid adaptation needed during the pandemic.<sup>15</sup> We believe that participation in the modified version of this improvement activity would be more likely to result in improved outcomes, because it promotes creation and implementation of standardized telehealth services, which can improve access and quality of care by offering another mode by which patients can interact with their care team.</p>
Proposed Revised Activity Description:	Create and implement a standardized process for providing telehealth services to expand access to care.
Comments:	Commenters expressed support for the proposed modifications to this improvement activity.
Response:	We appreciate the commenters' support.
Final Action:	After consideration of the public comments we received, we are finalizing this activity as proposed.
<b>Finalized Improvement Activity</b>	
Activity ID:	<b>IA_EPA_2</b>



Subcategory:	Expanded Practice Access
Activity Title:	Use of telehealth services that expand practice access
Activity Description:	Create and implement a standardized process for providing telehealth services to expand access to care.
Weighting:	Medium
<b>Current Improvement Activity</b>	
Current Activity ID:	IA PM 6
Current Subcategory:	Population Management
Current Activity Title:	Use of toolsets or other resources to close health care disparities across communities
Current Activity Description:	Take steps to improve healthcare disparities, such as Population Health Toolkit or other resources identified by CMS, the Learning and Action Network, Quality Innovation Network, or National Coordinating Center. Refer to the local Quality Improvement Organization (QIO) for additional steps to take for improving health status of communities as there are many steps to select from for satisfying this activity. QIOs work under the direction of CMS to assist MIPS eligible clinicians and groups with quality improvement, and review quality concerns for the protection of beneficiaries and the Medicare Trust Fund.
Current Weighting:	Medium
Proposed Change and Rationale:	<p>This improvement activity was originally finalized in the CY 2017 Quality Payment Program final rule (81 FR 77825). We proposed to add language that is more explicit about the improvement activity's focus on using population health data analysis to assess the prevalence of inequities in a practice and community.</p> <p>Specifically, we proposed to modify the activity description to specify that population health data analysis tools should be used to identify health inequities; MIPS eligible clinicians should then assess the options for effective interventions to address those inequities.<sup>16</sup> We also proposed to add a requirement that MIPS eligible clinicians create, refine, and implement an action plan to address inequities based on the data analysis conducted.</p> <p>We also proposed to remove references to the Learning and Action Network, Quality Innovation Network, and National Coordinating Center as organizations that may identify tools or resources, because they may not be appropriate resources to support clinicians in assessing and addressing health disparities. Population health data analytic tools may be identified in a number of ways, and we seek to keep the activity broad in this manner.</p> <p>We also proposed to replace the term "disparities" with "inequities" in both the title and description of the activity, which acknowledges structural problems like racism are inequities (that is, state of being unfair) rather than using the term disparities, which is defined as being different or not at parity but does not clearly state the unjustness of the result. We also proposed to modify the title to recognize that inequities in both health (that is, status and outcomes) and health care (that is, access, quality, and safety) may be addressed.</p> <p>With the proposed modifications, MIPS eligible clinicians attesting to this improvement activity would need to first analyze inequities in their patient populations, and then use that data to identify and then address issues or gaps. We believe that participation in the modified version of this improvement activity will be more likely to result in improved outcomes, because it is more focused on a data-driven approach to population health analysis and requires practices to use this data to inform a formal action planning process to address them.</p>
Proposed Revised Activity Title:	Use of Toolsets or Other Resources to Close Health and Health Care Inequities Across Communities
Proposed Revised Activity Description:	Address inequities in health outcomes by using population health data analysis tools to identify health inequities in the community and practice and assess options for effective and relevant interventions such as Population Health Toolkit or other resources identified by the clinician, practice, or by CMS. Based on this information, create, refine, and implement an action plan to address and close inequities in health outcomes and/or health care access, quality, and safety.
Comments:	Commenters expressed support for the proposed modifications to this improvement activity. One commenter was supportive of improvement activity modifications that addressed using data to address disparities in health equity, e.g., gathering and analyzing data by race and documenting disparities by different population groups. The commenter recommended that when implementing such modifications, CMS ensures that such modifications do not alter the core intent of the activity.
Response:	We appreciate the commenters' support and agree with this approach to implementing such modifications. When modifying several improvement activities to include collecting and analyzing population-level data, our intent is to highlight opportunities to strengthen core activities to close health equity gaps using a data-informed approach. This activity's modification specifies that population health data analysis tools should be used to identify health inequities. This strengthens, but does not alter, the intent of the activity, which was already focused on using toolsets or other resources to address such inequities. We refer stakeholders to the Executive



	Order On Advancing Racial Equity and Support for Underserved Communities Through the Federal Government for more information about health equity. <sup>17</sup>
Final Action:	After consideration of the public comments we received, we are finalizing this activity as proposed.
<b>Finalized Improvement Activity</b>	
Activity ID:	IA_PM_6
Subcategory:	Population Management
Activity Title:	Use of Toolsets or Other Resources to Close Health and Health Care Inequities Across Communities
Activity Description:	Address inequities in health outcomes by using population health data analysis tools to identify health inequities in the community and practice and assess options for effective and relevant interventions such as Population Health Toolkit or other resources identified by the clinician, practice, or by CMS. Based on this information, create, refine, and implement an action plan to address and close inequities in health outcomes and/or health care access, quality, and safety.
Weighting:	Medium
<b>Current Improvement Activity</b>	
Current Activity ID:	IA_PM_11
Current Subcategory:	Population Management
Current Activity Title:	Regular review practices in place on targeted patient population needs
Current Activity Description:	Implementation of regular reviews of targeted patient population needs, such as structured clinical case reviews, which includes access to reports that show unique characteristics of MIPS eligible clinician's patient population, identification of vulnerable patients, and how clinical treatment needs are being tailored, if necessary, to address unique needs and what resources in the community have been identified as additional resources.
Current Weighting:	Medium
Proposed Change and Rationale:	<p>This improvement activity was originally finalized in the CY 2017 Quality Payment Program final rule (81 FR 77825). We proposed to make explicit the acknowledgement that structural issues, like racism, are a root cause of many disparities in health outcomes across populations.</p> <p>Specifically, we proposed to modify the improvement activity to encourage MIPS eligible clinicians to explore structural issues like racism explicitly and openly during their reviews of targeted patient population needs. We proposed to remove reference to "vulnerable patients" and replace it with "underserved patients" to better clarify that there is nothing inherently vulnerable about a person. Instead, their poorer health outcomes are due to systemic failures within and beyond the health system—failures which leave the health needs of underserved communities unmet. We believe these additions would allow MIPS eligible clinicians to gain perspective and ideas beneficial to their patients by specifically identifying underserved patients, related structural inequities such as those due to racism, and tailor treatment needs and identify community resources to address those problems.</p> <p>We also proposed to modify the description language in ways that clarify the activity, but do not change the intent.</p> <p>We believe that participation in the modified version of this improvement activity would be more likely to result in improved outcomes, because it requires MIPS eligible clinicians to implement regular reviews of patient population needs to identify and address the needs of underserved populations and connect those patients to resources in the community.</p>
Proposed Revised Activity Description:	Implement regular reviews of targeted patient population needs, such as structured clinical case reviews, which include access to reports that show unique characteristics of MIPS eligible clinician's patient population, identification of underserved patients, and how clinical treatment needs are being tailored, if necessary, to address unique needs and what resources in the community have been identified as additional resources. The review should consider how structural inequities, such as racism, are influencing patterns of care and consider changes to acknowledge and address them. Reviews should stratify patient data by demographic characteristics and health related social needs to appropriately identify differences among unique populations and assess the drivers of gaps and disparities and identify interventions appropriate for the needs of the sub-populations.
Comments:	Commenters expressed support for the proposed modifications to this improvement activity.
Response:	We appreciate the commenters' support.
Final Action:	After consideration of the public comments we received, we are finalizing this activity as proposed.
<b>Finalized Improvement Activity</b>	
Activity ID:	IA_PM_11
Subcategory:	Population Management
Activity Title:	Regular review practices in place on targeted patient population needs
Activity Description:	Implement regular reviews of targeted patient population needs, such as structured clinical case



	reviews, which include access to reports that show unique characteristics of MIPS eligible clinician's patient population, identification of underserved patients, and how clinical treatment needs are being tailored, if necessary, to address unique needs and what resources in the community have been identified as additional resources. The review should consider how structural inequities, such as racism, are influencing patterns of care and consider changes to acknowledge and address them. Reviews should stratify patient data by demographic characteristics and health related social needs to appropriately identify differences among unique populations and assess the drivers of gaps and disparities and identify interventions appropriate for the needs of the sub-populations.
Weighting:	Medium
<b>Current Improvement Activity</b>	
Current Activity ID:	IA_PSPA_6
Current Subcategory:	Patient Safety and Practice Assessment
Current Activity Title:	Consultation of the Prescription Drug Monitoring program
Current Activity Description:	Clinicians would attest to reviewing the patients' history of controlled substance prescription using State prescription drug monitoring program (PDMP) data prior to the issuance of a Controlled Substance Schedule II (CSII) opioid prescription lasting longer than 3 days. For the transition year, clinicians would attest to 60 percent review of applicable patient's history. For the Quality Payment Program Year 2 and future years, clinicians would attest to 75 percent review of applicable patient's history performance.
Current Weighting:	High
Proposed Change and Rationale:	<p>This improvement activity was originally finalized in the CY 2017 Quality Payment Program final rule (81 FR 77825). We proposed to increase the percentage of applicable patients for whom clinicians must review prescription history within the PDMP from 75 percent to 100 percent and remove language referencing prior year requirements, which are now obsolete. States are increasingly mandating that providers review the PDMP for all applicable patients.<sup>18</sup></p> <p>We also proposed to include an exception for patients receiving palliative and hospice care, as they are exempt from CDC prescribing guidelines.<sup>19</sup> The CDC has identified increasing use of PDMP as the most promising State-level strategy for improving clinical care and outcomes for at-risk patients.<sup>20</sup> We support the continued efforts of MIPS eligible clinicians to increase usage of PDMP in their practice.</p> <p>We also proposed to modify the description language in ways that clarify the activity but do not affect its intent.</p> <p>We believe that participation in the modified version of this improvement activity would be more likely to result in improved outcomes, because it supports use of prescription drug monitoring programs to reduce overprescribing of controlled substance prescriptions lasting longer than three days,<sup>21</sup> which can lead to substance use disorder.</p>
Proposed Revised Activity Description:	Review the history of controlled substance prescriptions for 100 percent* of patients using State prescription drug monitoring program (PDMP) data prior to the issuance of a Controlled Substance Schedule II (CSII) opioid prescription lasting longer than 3 days. *Apply exceptions for patients receiving palliative and hospice care.
Comments:	One commenter stated they do not support the changes made to IA_PSPA_6 to increase the percentage of applicable patients for whom clinicians must review prescription history within the PDMP from 75 percent to 100 percent. They requested that CMS issue detailed guidance on which patient populations are exempt from these PDMP checks to ensure clinicians can provide individualized care and meet varied patient needs. They suggested that CMS take an alternative approach to this improvement activity—one that focuses on reducing deaths from non-medical use of drugs, which accounts for more drug-related deaths than prescriptions. Furthermore, they recommended a new/alternative activity that is intended to reduce deaths from non-medical use of drugs.
Response:	<p>The proposed modification to this improvement activity aligns with the CDC's guidance that increasing use of PDMP is the most promising State-level strategy for improving clinical care and outcomes for at-risk patients.<sup>20</sup> The PDMP is a basic tool to ensure clinicians are well-informed when prescribing opioids. We recognize that this improvement activity will not alone resolve the opioid epidemic. However, MIPS eligible clinicians implementing it can still reduce the overprescribing of controlled substance prescriptions. We invite stakeholders to submit new or alternate activities on this subject through the annual Call for Improvement Activities.</p> <p>With respect to the exceptions to this activity, the improvement activity includes exceptions for patients receiving palliative and hospice care, per the CDC prescribing guidelines.<sup>18</sup> We refer interested parties to the CDC's prescribing guidelines,<sup>18</sup> which state clear definitions for palliative care and hospice care.</p> <p>Checking the PDMP would not preclude the prescription of opioids after careful individual</p>



	evaluation. While we understand that 100 percent seem to be a high, we believe that 75 percent is too low. Due the importance of reviewing the history of controlled substance prescriptions using PDMP data we believe that a 90 percent is attainable and does not require perfection in instances where a review is impossible.
Final Action:	After consideration of the public comments we received, we are finalizing this activity with an increase in the percentage of applicable patients for whom MIPS eligible clinicians must review prescription history within the PDMP from 75 percent to 90 percent, instead of the proposed increase to 100 percent. We also added language to direct clinicians to the CDC prescribing guidelines for determining exceptions to this activity's required prescription history review percentage.
<b>Finalized Improvement Activity</b>	
Activity ID:	IA_PSPA_6
Subcategory:	Patient Safety and Practice Assessment
Activity Title:	Consultation of the Prescription Drug Monitoring program
Activity Description:	Review the history of controlled substance prescriptions for 90 percent* of patients using State prescription drug monitoring program (PDMP) data prior to the issuance of a Controlled Substance Schedule II (CSII) opioid prescription lasting longer than 3 days. *Apply exceptions for patients receiving palliative and hospice care per CDC prescribing guidelines.
Weighting:	High
<b>Current Improvement Activity</b>	
Current Activity ID:	IA_PSPA_18
Current Subcategory:	Patient Safety and Practice Assessment
Current Activity Title:	Measurement and improvement at the practice and panel level
Current Activity Description:	<p>Measure and improve quality at the practice and panel level, such as the American Board of Orthopaedic Surgery (ABOS) Physician Scorecards, that could include one or more of the following:</p> <ul style="list-style-type: none"> <li>• Regularly review measures of quality, utilization, patient satisfaction and other measures that may be useful at the practice level and at the level of the care team or MIPS eligible clinician or group (panel); and/or</li> <li>• Use relevant data sources to create benchmarks and goals for performance at the practice level and panel level.</li> </ul>
Current Weighting:	Medium
Proposed Change and Rationale:	<p>This improvement activity was originally finalized in the CY 2017 Quality Payment Program final rule (81 FR 77825). We proposed to modify this activity to include the opportunities for MIPS eligible clinicians to fulfill this improvement activity by applying the quality, utilization, patient satisfaction, and other measures or quality improvement actions to address inequities in quality and outcomes for underserved populations, including racial, ethnic, and gender minorities.</p> <p>We also proposed to improve the activity language in ways that clarify the activity, but do not affect its intent, including simplifying the first activity option by removing the language "that may be useful at the practice level and at the level of the care team or MIPS eligible clinician or group (panel)," since it is stated at the beginning of the description that these activities can take place at the practice and panel levels.</p> <p>We believe that participation in the modified version of this improvement activity would be more likely to result in improved outcomes, because MIPS eligible clinicians who review these relevant data sources for particular underserved populations and create benchmarks and goals for improvement are likely to provide better quality and more equitable care.</p>
Proposed Revised Activity Description:	<p>Measure and improve quality at the practice and panel level, such as the American Board of Orthopaedic Surgery (ABOS) Physician Scorecards that could include one or more of the following:</p> <ul style="list-style-type: none"> <li>• Regularly review measures of quality, utilization, patient satisfaction and other measures; and/or</li> <li>• Use relevant data sources to create benchmarks and goals for performance at the practice or panel levels.</li> </ul> <p>MIPS eligible clinicians can apply the measurement and quality improvement to address inequities in quality and outcomes for underserved populations, including racial, ethnic, and/or gender minorities.</p>
Comments:	One commenter was supportive of improvement activity modifications that addressed using data to address disparities in health equity, e.g., gathering and analyzing data by race and documenting disparities by different population groups. The commenter recommended that when implementing such modifications, we ensure that such modifications do not alter the core intent of the activity.
Response:	We thank this commenter for this input and agree with this approach. When modifying several improvement activities to include collecting and analyzing population-level data, our intent is to highlight opportunities to strengthen core activities to close health equity gaps using a data-informed approach. This activity's modification includes an option, not a requirement, to use data to create benchmarks or performance goals to address inequities and improve outcomes.



Final Action:	After consideration of the public comments we received, we are finalizing this activity as proposed.
<b>Finalized Improvement Activity</b>	
Activity ID:	<b>IA_PSPA_18</b>
Subcategory:	Patient Safety and Practice Assessment
Activity Title:	Measurement and improvement at the practice and panel level
Activity Description:	<p>Measure and improve quality at the practice and panel level, such as the American Board of Orthopaedic Surgery (ABOS) Physician Scorecards that could include one or more of the following:</p> <ul style="list-style-type: none"> <li>Regularly review measures of quality, utilization, patient satisfaction and other measures; and/or</li> <li>Use relevant data sources to create benchmarks and goals for performance at the practice or panel levels.</li> </ul> <p>MIPS eligible clinicians can apply the measurement and quality improvement to address inequities in quality and outcomes for underserved populations, including racial, ethnic, and/or gender minorities.</p>
Weighting:	Medium
<b>Current Improvement Activity</b>	
Current Activity ID:	<b>IA_ERP_3</b>
Current Subcategory:	Emergency Response and Preparedness
Current Activity Title:	COVID-19 Clinical Data Reporting with or without Clinical Trial
Current Activity Description:	<p>To receive credit for this improvement activity, a MIPS eligible clinician or group must: (1) participate in a COVID-19 clinical trial utilizing a drug or biological product to treat a patient with a COVID-19 infection and report their findings through a clinical data repository or clinical data registry for the duration of their study; or (2) participate in the care of patients diagnosed with COVID-19 and simultaneously submit relevant clinical data to a clinical data registry for ongoing or future COVID-19 research. Data should be submitted to the extent permitted by applicable privacy and security laws. Examples of COVID-19 clinical trials may be found on the U.S. National Library of Medicine website at <a href="https://clinicaltrials.gov/ct2/results?cond=COVID-19">https://clinicaltrials.gov/ct2/results?cond=COVID-19</a>. In addition, examples of COVID-19 clinical data registries may be found on the National Institute of Health website at <a href="https://search.nih.gov/search?utf8=%E2%9C%93&amp;affiliate=nih&amp;query=COVID19+registries&amp;commit=Search">https://search.nih.gov/search?utf8=%E2%9C%93&amp;affiliate=nih&amp;query=COVID19+registries&amp;commit=Search</a>.</p> <p>For purposes of this improvement activity, clinical data registries must meet the following requirements: (1) the receiving entity must declare that they are ready to accept data as a clinical registry; and (2) be using the data to improve population health outcomes. Most public health agencies and clinical data registries declare readiness to accept data from clinicians via a public online posting. Clinical data registries should make publicly available specific information on what data the registry gathers, technical requirements or specifications for how the registry can receive the data, and how the registry may use, re-use, or disclose individually identifiable data it receives. For purposes of credit toward this improvement activity, any data should be sent to the clinical data registry in a structured format, which the registry is capable of receiving. A MIPS eligible clinician may submit the data using any standard or format that is supported by the clinician's health IT systems, including but not limited to, certified functions within those systems. Such methods may include, but are not limited to, a secure upload function on a web portal, or submission via an intermediary, such as a health information exchange. To ensure interoperability and versatility of the data submitted, any electronic data should be submitted to the clinical data registry using appropriate vocabulary standards for the specific data elements, such as those identified in the United States Core Data for Interoperability (USCDI) standard adopted in 45 CFR 170.213.</p>
Current Weighting:	High
Proposed Action and Rationale:	<p>We previously adopted this improvement activity to the inventory for the 2020 and 2021 MIPS performance periods only in response to the PHE for COVID-19 and planned to reassess its need for the CY 2022 performance period/2024 MIPS payment year and future years. We proposed to continue this improvement activity for the CY 2022 performance period/2024 MIPS payment year and future years.</p> <p>Despite increasing dissemination of COVID-19 vaccines, we anticipate that COVID-19 infections may continue to be prevalent in communities with low vaccine adoption and/or among groups (i.e., children) who do not yet have access to vaccines. Additionally, new variants of COVID may introduce additional challenges to the eradication and treatment of the illness. Due to these concerns, clinicians may likely continue to encounter COVID-19 patients, and therefore we anticipate the need for COVID-19 clinical trials and data collection/sharing through registries to continue through CY 2022 and future years. Each year we will reassess whether there remains a</p>



	need for additional data sharing or if preventive measures and clinical treatments have advanced to the point where these type of data are not needed. We want MIPS eligible clinicians to be able to attest to this improvement activity if it is still pertinent. If this improvement activity becomes no longer needed, we would remove the activity through rulemaking. While COVID-19 continues to be a PHE and a great concern for clinicians, patients, and communities, we believe that continued participation in this improvement activity would result in improved outcomes by improving the collection of data MIPS eligible clinicians use for the care of their patients as they monitor and manage COVID-19.
	We note that the activity description will remain the same.
Comments:	One commenter expressed support for the proposed modifications to this improvement activity and suggested we continue to extend the improvement activity as long as appropriate.
Response:	We appreciate the commenter's support.
Final Action:	After consideration of the public comment we received, we are finalizing this activity as proposed.
<b>Finalized Improvement Activity</b>	
Activity ID:	IA_ERP_3
Subcategory:	Emergency Response and Preparedness
Activity Title:	COVID-19 Clinical Data Reporting with or without Clinical Trial
Activity Description:	<p>To receive credit for this improvement activity, a MIPS eligible clinician or group must: (1) participate in a COVID-19 clinical trial utilizing a drug or biological product to treat a patient with a COVID-19 infection and report their findings through a clinical data repository or clinical data registry for the duration of their study; or (2) participate in the care of patients diagnosed with COVID-19 and simultaneously submit relevant clinical data to a clinical data registry for ongoing or future COVID-19 research. Data should be submitted to the extent permitted by applicable privacy and security laws. Examples of COVID-19 clinical trials may be found on the U.S. National Library of Medicine website at <a href="https://clinicaltrials.gov/ct2/results?cond=COVID-19">https://clinicaltrials.gov/ct2/results?cond=COVID-19</a>. In addition, examples of COVID-19 clinical data registries may be found on the National Institute of Health website at <a href="https://search.nih.gov/search?utf8=%E2%9C%93&amp;affiliate=nih&amp;query=COVID19+registries&amp;commit=Search">https://search.nih.gov/search?utf8=%E2%9C%93&amp;affiliate=nih&amp;query=COVID19+registries&amp;commit=Search</a>.</p> <p>For purposes of this improvement activity, clinical data registries must meet the following requirements: (1) the receiving entity must declare that they are ready to accept data as a clinical registry; and (2) be using the data to improve population health outcomes. Most public health agencies and clinical data registries declare readiness to accept data from clinicians via a public online posting. Clinical data registries should make publicly available specific information on what data the registry gathers, technical requirements or specifications for how the registry can receive the data, and how the registry may use, re-use, or disclose individually identifiable data it receives. For purposes of credit toward this improvement activity, any data should be sent to the clinical data registry in a structured format, which the registry is capable of receiving. A MIPS eligible clinician may submit the data using any standard or format that is supported by the clinician's health IT systems, including but not limited to, certified functions within those systems. Such methods may include, but are not limited to, a secure upload function on a web portal, or submission via an intermediary, such as a health information exchange. To ensure interoperability and versatility of the data submitted, any electronic data should be submitted to the clinical data registry using appropriate vocabulary standards for the specific data elements, such as those identified in the United States Core Data for Interoperability (USCDI) standard adopted in 45 CFR 170.213.</p>
Weighting:	High

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September 13, 2021

Chiquita Brooks-LaSure  
Administrator  
Centers for Medicare & Medicaid Services  
Department of Health and Human Services  
Attention: CMS-1751-P  
Mail Stop C4-26-05  
7500 Security Boulevard  
Baltimore, MD 21244-1850

**RE: Medicare Program; CY 2022 Payment Policies under the Physician Fee Schedule and Other Changes to Part B Payment Policies; Medicare Shared Savings Program Requirements; Provider Enrollment Regulation Updates; Provider and Supplier Prepayment and Post-payment Medical Review Requirements.**

Dear Administrator Brooks-LaSure:

The American College of Radiology (ACR), representing nearly 40,000 diagnostic radiologists, interventional radiologists, radiation oncologists, nuclear medicine physicians and medical physicists, appreciates the opportunity to submit comments to the Centers for Medicare & Medicaid Services (CMS) on the calendar year (CY) 2022 Medicare Physician Fee Schedule (MPFS) Proposed Rule. In this comment letter, we address the following important issues:

**Payment Provisions**

- Appropriate Use Criteria (AUC) for Advanced Diagnostic Imaging Services (ADIS)
- Clinical Labor Pricing Update
- Codes Involving Innovative Technology
- Valuation of Specific Codes
- Proposal to Remove Selected National Coverage Determinations (NCDs)
- Billing for Physician Assistant (PA) Services
- Physician Self-Referral Updates
- Telehealth

**Quality Payment Program**

- Advancing to Digital Quality Measurement and Use of Fast Healthcare Interoperability Resources (FHIR) in Physician Quality Programs
- Closing the Health Equity Gap in CMS Clinician Quality Programs





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- Transforming Merit-Based Incentive Payment System (MIPS): MIPS Value Pathways (MVPs)
  - MVP and Subgroup Implementation Timeline
  - Selection of Measures and Improvement Activities within an MVP
  - Public Reporting of MVP Data
  - Facility-Based Measurement
  - MIPS: Claims Reporting for Small Practices
  - MIPS: Quality Measures Scoring
  - MIPS Quality Performance Category: Removal of Bonus Points
  - MIPS: Quality Measure Data Completeness
  - MIPS: Quality Measures Proposed for Removal
  - MIPS: Reweighting Policy for Small Practices
  - MIPS: Cost Performance Category
  - MIPS: Improvement Activities (IA) Performance Category
  - MIPS: Performance Categories that Must Be Supported by Third Party Intermediaries
  - Qualified Clinical Data Registry (QCDR) Not Approved or Not in Good Standing
  - QCDR Measure Testing Requirements for CY 2023 and Beyond

## **PAYMENT PROVISIONS**

### **Appropriate Use Criteria (AUC) for Advanced Diagnostic Imaging Services (ADIS)**

#### ***Proposal***

The AUC program, mandated by the Patient Access to Medicare Act of 2014 (PAMA) is currently scheduled to enter the payment penalty phase on January 1, 2022. However, there remain many complexities around the scope and application of AUC program claims processing edits. In addition, given the circumstances of physicians and other practitioners due to the public health emergency (PHE) for COVID-19, CMS recognizes that additional time may be needed to prepare for the payment penalty phase.

The earliest the CMS claims processing system can begin screening claims using the AUC program claims processing edits for the payment penalty phase is October 2022. CMS notes that an effective date for the claims processing edits in October is not aligned with typical annual updates to the systems used by healthcare providers. Therefore, the earliest practicable effective date for the AUC program claims processing edits and payment penalty phase is January 1, 2023. CMS proposed a flexible effective date for the AUC program payment penalty phase to begin the later of January 1, 2023, or the January 1 that follows the declared end of the PHE for COVID-19. In addition, CMS requested feedback on whether claims that do not pass the AUC claims processing edits should be returned to the provider to be corrected and resubmitted or should be denied to allow the provider to appeal.

The proposed rule also includes proposals to address outstanding claims processing issues to ensure that claims are not inappropriately denied once the program enters the penalty phase.





CMS proposed to repurpose modifier MH to describe situations in which the ordering professional is not required to consult AUC (e.g., critical access hospital claims and Maryland Total Cost of Care Model). The MH modifier is currently used in the educational and operations testing period to identify claims for which AUC consultation information was not provided to the furnishing provider and facility.

### ***ACR Perspective and Comments***

The PAMA AUC policy for advanced diagnostic imaging services is designed to curb patient exposure to unnecessary radiation, reduce Medicare spending on low-value advanced imaging procedures, promote the movement towards value-based care, and be a more credible policy alternative to the imposition of burdensome advanced imaging prior authorization programs in Medicare. The ACR is committed to continuing to work with CMS to ensure the program's successful implementation as soon as possible.

Understanding the hardships healthcare providers have faced during the COVID-19 PHE, the **ACR supports CMS' proposal to begin the penalty phase of the AUC program on January 1, 2023, or the January 1 following the end of the PHE.** In the meantime, CMS should continue education efforts and encourage providers to submit AUC consultation information with applicable advanced diagnostic imaging claims. As acknowledged in the rule, while there are providers who have had to pause efforts to include AUC consultation in workflows, many other providers have already invested significant time and expense in qualified clinical decision support mechanisms.

The ACR understands the challenges CMS has faced with developing claims processing edits to implement the PAMA AUC program in a way that ensures claims are not inappropriately denied when the penalty phase of the program begins. The College believes that the solutions proposed in this MPFS rule are good workable solutions to identifying claims that are not subject to the PAMA AUC mandate. However, the ACR has concerns about repurposing modifier MH, created for use during the educational and operations testing period to identify claims for which AUC consultation information was not provided to the furnishing professional and facility, to report claims that are not subject to the AUC mandate (e.g., critical access hospitals) once the penalty phase begins. Rather, the **ACR requests that CMS create a new modifier to identify such claims to avoid any confusion and/or continued use of the MH modifier for claims where AUC consultation information was not provided.**

CMS requested feedback on whether, once the penalty phase of the AUC program begins, claims that do not properly include AUC consultation information should be initially returned to the health care provider to be corrected and resubmitted or if such claims should be denied so they can be appealed. **The ACR feels that given the complex nature of the claims requirements, claims that do not properly include AUC consultation should be returned to the provider to be corrected and resubmitted.**

The ACR appreciates CMS' ongoing commitment and efforts to fully implement this important PAMA AUC program despite challenges and the PHE. As stated above, the proposals in this



MPFS rule are workable and a positive step toward fulfilling the Congressional mandate. The ACR is committed to continuing to work with CMS to ensure the success of the AUC program and for all Medicare patients to receive the right advanced diagnostic imaging tests at the right time.

### **Clinical Labor Pricing Update**

#### ***Proposal***

CMS is proposing to update prices for clinical staff for the first time since 2002. This review is partially in response to recent efforts to update the supply and equipment prices, and also due to stakeholders' concerns about clinical labor costs not being reflective of current wages. Updating clinical labor would also maintain relativity within the direct practice expense (PE), since the supply and equipment are reaching the end of their four-year phase-in.

CMS is proposing to use 2019 data from the Bureau of Labor Statistics (BLS), citing it as the most accurate source. However, they will use other resources such as Salary Expert, or a crosswalk methodology, where appropriate, if the BLS does not contain the staff type. Based on the proposed pricing update provided by CMS in Table 5 of the MPFS Proposed Rule, it appears that all of the clinical labor types will receive a positive increase. However, these increases yield an overall negative impact on some physician specialties such as vascular surgery, radiation oncology, and interventional radiology (Table 6 of the MPFS Proposed Rule). Practice Expense is budget neutral. Therefore, specialties with most of their direct costs linked to supplies and equipment are more likely to experience a negative impact as a result of an increase in the clinical labor wages.

Of note for radiology, the BLS data did not have wage data specific for a Mammography Technologist. Instead, CMS used data from Salary Expert and Respiratory Therapist BLS data as a proxy to calculate the proposed wage for a Mammography Technologist. Similarly, since BLS data only contains wage data for a general physicist, CMS is proposing to apply the 75<sup>th</sup> percentile of the average wage data for a general physicist to determine the wage for a Medical Physicist.

CMS is considering a four-year phase-in of the updated clinical labor pricing, similar to what they did for the supply and equipment pricing updates. CMS welcomes stakeholder feedback on the updated pricing, especially for the clinical staff types for which they did not have direct BLS data and utilized proxies to calculate the wage. They are looking for sources of direct wage data, as well as suggestions for more appropriate proxies to use from the BLS data.

#### ***ACR Perspective and Comments***

The ACR believes that CMS' proposal to update the prices of clinical staff has merits since it hasn't been updated since 2002. While we understand the reason for the update, **we are deeply concerned about the timing and the devastating redistributive effect this update will impose upon radiology, especially interventional radiology and radiation oncology services, as well**






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**as other medical specialties where the practice expense costs rely primarily on supply or equipment items.**

Taking into account that the updated pricing for supplies and equipment is in its final year of transition, the sizeable cuts to other services as a result of the recent evaluation and management (E/M) increases and the impact on all physicians in the continuing battle with COVID-19, radiology practices including many other physician practices are already facing a myriad of economic hardships. In light of these substantial financial uncertainties for health care practices, **the ACR requests that CMS transition the clinical labor update over five years, with the first year at zero percent.** This will allow the Agency and stakeholders time to further evaluate how the BLS data is used and applied, including the implications the disproportionate effects will have on certain specialties. We also request additional time to consider whether the application of BLS data is appropriate, such as the use of the 2002 benefits multiplier.

**The ACR also believes that the updates to direct practice expense components should take place on a regular basis to prevent significant redistributive effects to specialties in the future.** These negative impacts not only hurt physician practices who are already struggling to keep their doors open; they also impact patients and their access to services and quality care. Physicians should be able to expect year-to-year stability in their payment rates rather than continuing annual large changes to payment rates that make budgeting and planning extremely difficult and uncertain. CMS should make year-to-year payment stability a goal of the MPFS and large redistributive impacts on payment should occur infrequently.

While we support updated clinical staff pricing to reflect inflation, **we strongly disagree that this should be done within the confines of a budget neutral system, unless there are concomitant inflationary updates to the entire fee schedule.** Under this logic, a physician office would have to choose between paying clinical staff fairly, or maintaining current investment in equipment, supplies, other facility costs, and/or physician compensation. Of course, we have all given our clinical staff raises over the past two decades, so the staff pricing updates only serve to redistribute payments amongst specialties within a fixed fee schedule.

The ACR appreciates CMS providing the BLS crosswalks they used to update the clinical labor pricing and allowing stakeholders the opportunity to provide comment on the appropriateness of those crosswalks where BLS data is not available for the staff types:

- For a mammography technologist, the ACR supports CMS' proposed crosswalk to a respiratory therapist (BLS 29-1126).
- For a CT technologist, the ACR supports CMS' proposed crosswalk to the MRI technologist (BLS 29-2035).
- For an angio technician, CMS proposes a crosswalk to "Other Healthcare Provider" (BLS 29-9000). In the past, an angio technician has been crosswalked to a radiologic technologist (BLS 29-2034). However, based on educational requirements and clinical similarities, the ACR recommends that the wage for an angio technician be crosswalked to that of an MRI technologist (BLS 29-2035) instead. An angio technician requires more



training and credentials beyond that of a radiologic technologist and performs procedures with higher intensities more in line with an MRI technologist.

- For the vascular technician, the ACR supports CMS' proposed crosswalk to a medical scientist (BLS 19-1040).
- For the medical physicist, CMS proposes a crosswalk to the 75<sup>th</sup> percentile of the average wage of a general physicist (BLS 19-2012). CMS acknowledges that a general physicist is paid lower than a medical physicist, which is why they proposed the 75<sup>th</sup> percentile. However, the ACR is concerned that the crosswalk will not accurately capture the wage of a medical physicist. Instead, we propose that CMS use the 2020 salary data collected by the American Association of Physicists in Medicine (AAPM). This is consistent with the methodology applied in 2002, when CMS used AAPM survey data instead of the BLS data.

### **Comment Solicitation for Codes Involving Innovative Technology**

#### ***Proposal***

In the proposed rule, CMS states that recent technological advances such as artificial intelligence (AI) may increase patients' access to care, improve outcomes, and possibly substitute or augment physician work. However, CMS is requesting feedback from stakeholders to help them understand the resource costs associated with procedures using AI or software algorithms. CMS admits that the current PE methodology does not capture indirect costs such as software and licensing fees that the innovative technologies rely on.

CMS poses several questions to stakeholders about how AI technologies and software contribute to physician work, as well as the resource costs associated with these procedures. CMS is soliciting feedback on the effects of AI on physician work, time and intensity, how to best capture AI costs, the risk of fraud and abuse over its utilization, and how it contributes to improvements in quality of care.

#### ***ACR Perspective and Comments***

The ACR addresses CMS' questions below:

- 1) To what extent are services involving innovative technologies such as software algorithms and/or AI substitutes and/or supplements for physician work? To what extent do these services involving innovative technology inform, augment, or replace physician work?

*The ACR is currently unaware of any services involving innovative technologies that have made a significant impact in the workflow for radiologists. Most of the Food and Drug Administration (FDA) approved AI software algorithms are simple detection algorithms which compliment only one of many tasks a radiologist must perform during diagnostic interrogation of an imaging modality. These simple algorithms require a radiologist validation, therefore are not supplanting any human work, and may in fact add work. Overall, we believe that these services do not replace physician work.*





2) How has innovative technology such as software algorithms and/or AI affected physician work time and intensity of furnishing services involving the use of such technology to Medicare beneficiaries?

*The ACR believes that services involving innovative technologies, through detection of critical findings and prioritization of examinations, have the potential to improve patient care by assisting the physician in making a critical diagnosis more rapidly. However, the process of validating AI inferences while fully interpreting the examination for any associated or incidental abnormalities does not change the intensity of the physician work and may contribute to increased interpretation time.*

3) How is innovative technology such as software algorithms and/or AI changing cost structures in the physician office setting? Do costs for innovative technology such as software algorithms and/or AI to furnish services to patients involve a one-time investment and/or recurring costs? How should CMS consider costs for software algorithms and/or AI that use patient data that were previously collected as part of another service? As technology adoption grows, do these costs decrease over time?

*The ACR believes that innovative technologies such as software algorithms for diagnostic imaging should be considered part of the service provided to the patient. It is likely that some AI software models will be able to use data collected as part of a previous imaging service or even amalgamate data from disparate sources to provide inferences that allow physicians to augment the care provided to their patients. While there should not be duplicative costs associated with data from examinations and other resources already performed, there could be costs associated with the amalgamation of the models' input data when it comes from disparate sources. At present there is no standard model or pricing for how end-users of AI technologies are paying the software vendors. For diagnostic imaging, in some cases, the addition of AI will be a standalone service in the workflow process. Currently, identification of single diseases is typical for models currently in clinical use. However, we should anticipate that models that are able to detect multiple diseases will become available and could impact cost-efficiency. In other cases, AI models may become embedded in the modalities themselves, with the AI cost becoming embedded in the overall pricing of the modality. We expect the delivery of AI to evolve synergistically with adoption of payment policies for AI. Adoption of new technology and the potential for increasing efficiency over time has long been considered by CMS. Payment policy for new technologies are reevaluated through the Relative Value Scale Update Committee (RUC) process and recommendations are given to CMS for their consideration. As such, we anticipate the long term efficiencies for innovative technologies such as AI will continually be monitored through the RUC valuation process as well.*

4) How is innovative technology affecting beneficiary access to Medicare-covered services? How are services involving software algorithms and/or AI being furnished to Medicare beneficiaries and what is important for CMS to understand as it considers how to accurately pay for services involving software algorithms and/or AI? Additionally, to what extent have services that involve innovative technology such as software algorithms and/or AI affected access to



Medicare-covered services in rural and/or underserved areas, or for beneficiaries that may face barriers (homelessness, lack of access to transportation, lower levels of health literacy, lower rates of internet access, mental illness, having a high number of chronic conditions/frailty, etc.) in obtaining health care?

*It is too early to tell whether AI will affect access to care or whether there will be disparity in whether certain beneficiaries have access to innovative technology. We are optimistic that AI will help our health systems overcome disparities in care by identifying patients at high risk for disease and alert those patients and their healthcare providers. We also believe AI will be able to monitor patients' compliance with therapy to ensure downstream care is obtained and identify and mitigate the potential barriers to care for some patients. It is also too soon to know whether there will be disparities in the use of AI among Medicare beneficiaries. We see both challenges and opportunities for rural practices. Rural practices are typically smaller and may be more limited in resources. A recent survey conducted by the ACR Data Science Institute (Allen B, Agarwal S, Coombs L, Wald C, Dreyer K. 2020 ACR Data Science Institute Artificial Intelligence Survey. Journal of the American College of Radiology. 2021 Apr 20) showed that only 23% of practices were using AI in their clinical workflow and the use of AI in smaller practices was significantly lower than in larger practices, in part because they believe AI could make them less efficient due to redundancy in physician work. At the same time, it is possible that innovative technology such as AI can enable smaller practices to more efficiently augment the care they currently provide. To facilitate that process, we believe that government entities should support cloud-based solutions for healthcare to increase access to these healthcare services. We look forward to working with the Agency as this process evolves to determine ways to close any potential gaps concerning access to care for all Medicare beneficiaries.*

5) Compared to other services paid under the MPFS, are services that are driven by or supported by innovative technology such as software algorithms and/or AI at greater risk of overutilization or more subject to fraud, waste, and abuse? To what extent do services involving innovative technology require mechanisms such as appropriate use criteria to guard against overutilization, fraud, waste, or abuse?

*The potential to improve population health by identification of diseases prior to the onset of symptoms is one of the strengths of AI for healthcare. Quantification of liver fat, pulmonary emphysema, coronary artery disease, bone density and potentially many other disease processes is something human interpreters cannot do as part of routine interpretation of imaging studies. We know early treatment of these disease processes in the right patient populations can improve outcomes. However, there is always concern for potential over treatment and associated downstream costs for what some might consider unnecessary care. An anecdotal example is a suggestion from pulmonary physicians that quantitative AI be performed on every patient to identify patients for escalation of care including the placement of endobronchial valves. We should be mindful that while AI quantification will be a useful adjunct to care, it should not be the driver for care escalation. The ACR believes that the Agency should closely monitor the downstream consequences of the use of these types of innovative technologies in the fee-for-service environment. If there is inappropriate downstream utilization and escalation of costs*






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*without demonstrable benefit, then CMS should consider whether these types of opportunistic screening examinations are only appropriate in value-based payment systems. Another consideration is that AI can inappropriately increase sensitivity by detection of subtle findings. In isolation, this has the potential to escalate care and is a reminder both radiological expertise and clinical judgement must be used in concert with AI to avoid inappropriate care escalation that may be unnecessary and wasteful.*

6) Compared to other services paid under the MPFS, are services driven by or supported by innovative technology such as software algorithms and/or AI associated with improvements in the quality of care or improvements in health equity? Additionally, taking into consideration that a software algorithm and/or AI may introduce bias into clinical decision making that could influence outcomes for racial and ethnic minorities and people who are socioeconomically disadvantaged, are there guardrails, such as removing the source of bias in a software algorithm and/or AI, that Medicare should require as part of considering payment amounts for services enabled by software algorithm and/or AI?

*The ACR is certainly mindful that bias can be introduced into AI models if training datasets are not typical of patient populations where the models will be used. End-users cannot expect AI to perform as expected without local evaluation and downstream monitoring. Unfortunately, the current U.S. FDA clearance process does not ensure generalizability in AI models and, as such, end-users have to assume responsibility for confirming the AI inferences and continuously monitor algorithm performance over time to ensure there is no degradation from changing equipment, protocols or patient population. Throughout the product life cycle, developers should consider unintended bias and provide transparency regarding datasets used for training, testing, development and validation. This should be a multi-agency effort, with involvement from the FDA, to ensure that a given vendor creates algorithms that are unbiased from a health equity lens.*

7) How might CMS consider updating such data to reflect ongoing advances in technology so that we could establish appropriate relative values without resorting to crosswalks?

*The number of AI models receiving FDA clearance is escalating and there are currently approximately 130 FDA cleared models for diagnostic imaging. As this process continues, we anticipate thousands of AI models could become available for clinical use over the next decade. New technologies are being categorized by the FDA into discrete groups of tools based on similarities in intended use and how the models function. The ACR believes that CMS should be cognizant of those categories but also consider whether resources to provide the service are disparate, and based on those observations consider creating an APC-like model for new technologies in which there are 4 to 5 payment categories (each with a standard crosswalk based on intended use, functionality and resources required) for these services to be placed into in order to streamline the process of updating the data based on technological advancement.*




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## **Proposed Valuation of Specific Codes for CY 2022**

### **Needle Biopsy of Lymph Nodes (CPT code 38505)**

#### ***Proposal***

CPT Code 38505 (Biopsy or excision of lymph node(s); by needle, superficial (e.g., cervical, inguinal, axillary)) was identified on a screen for Harvard Valued codes with utilization over 30,000. The code was reviewed at the January 2020 RUC meeting, at which the RUC approved an increased work RVU of 1.59, due to changes in technology and the dominant specialty. CMS is proposing to accept the increased work RVU of 1.59, as well as the RUC-recommended PE inputs.

#### ***ACR Perspective and Comments***

The ACR supports CMS' proposal to accept the RUC recommendation for physician work and PE inputs for CPT code 38505.

### **Trabecular Bone Score (TBS) (CPT codes 77X01, 77X02, 77X03, and 77X04)**

#### ***Proposal***

Four new codes for Trabecular Bone Score (TBS) were created by the CPT Editorial Panel: 77X01 (Trabecular bone score (TBS), structural condition of the bone microarchitecture; using dual x-ray absorptiometry (DXA) or other imaging data on gray-scale variogram, calculation, with interpretation and report on fracture risk), 77X02 (Trabecular bone score (TBS), structural condition of the bone microarchitecture; technical preparation and transmission of data for analysis to be performed elsewhere), 77X03 (Trabecular bone score (TBS), structural condition of the bone microarchitecture; technical calculation only), and 77X04 (Trabecular bone score (TBS), structural condition of the bone microarchitecture; interpretation and report on fracture risk only, by other qualified healthcare professional). Two of the codes, 77X02 and 77X03 are PE-only codes and do not have a physician work component.

One of the new PE supply inputs recommended by the RUC for CPT codes 77X01 and 77X03 is the "TBS iNsight Software," which is priced "per click" for use with the software. This type of input does not translate into the current PE methodology, as it would typically be considered an indirect input. For this reason, CMS is proposing to crosswalk the PE values for the TBS code family, using CPT code 71101 (Radiologic examination, ribs, unilateral; including posteroanterior chest, minimum of 3 views), as a comparator at 0.94 PE RVUs. The sum of 77X02, 77X03, and 77X04 should equal that of 77X01. CMS is looking for feedback on the use of this methodology to value the PE for the TBS codes, as well as general comments on the PE methodology.

#### ***ACR Perspective and Comments***

The ACR supports CMS' proposal to accept the physician work valuation for CPT codes 77X01 and 77X04, both at 0.20 RVUs. However, the ACR disagrees with the PE crosswalk of CPT codes 77X01 and 77X03 to CPT code 71101. The procedures are not analogous, and we urge





CMS to reconsider the RUC's PE recommendations. The iNsign software is priced per scan at \$25, which the RUC agreed is appropriate to list as a single-use supply item, as equipment inputs are typically allotted minutes. Currently, some of CMS' approved equipment inputs include software, so this is not a new precedent.

### **Proposal to Remove Selected National Coverage Determinations (NCDs)**

#### ***Proposal***

CMS proposed to remove the NCD for Positron Emission Tomography (PET) Scans (220.6). CMS believes that allowing local contractor discretion to make a coverage decision for PET scans better serves the needs of the Medicare program and its beneficiaries. This NCD was established in 2000 and indicated broad national non-coverage for non-oncologic indications of PET. This meant that CMS required that every non-oncologic indication for PET to have its own NCD in order to receive coverage.

In 2013, CMS reconsidered the NCD to allow coverage for diagnostic PET imaging for oncologic uses not already determined by an NCD, to be made at the discretion of local Medicare Administrative Contractors (MACs), due to "various improvements in the technical, regulatory and professional aspects of PET imaging for diagnosis." Since the 2013 reconsideration, new non-oncologic PET agents have been approved by the FDA and multiple professional medical societies have published guidelines relevant to appropriate use of these agents. CMS believes that local contractor discretion provides an immediate avenue to potential coverage in appropriate candidates for non-oncologic indications. Therefore, CMS proposed to eliminate subsection 220.6 to remove the broad national bar to coverage of PET scans for non-oncologic indications, thus allowing local Medicare contractors to make a coverage determination. CMS did not propose to change any other subsections of 220.6. Thus, the NCDs listed at 220.6.1 through 220.6.20 would not be changed by this proposal.

#### ***ACR Perspective and Comments***

**The ACR supports CMS' proposal to remove the NCD for PET Scans (220.6), allowing coverage decisions to be made by MACs.** In addition to new non-oncologic PET agents that have been approved by the FDA, significant evidence in support of the use of 18F FDG in specific non-oncologic applications has also been developed. There is broad support in the literature and current practice for the use of 18F FDG in non-oncologic applications. The Society of Nuclear Medicine and Molecular Imaging has developed and [published](#) procedure standards for infection and inflammation.

### **Billing for Physician Assistant (PA) Services**

#### ***Proposal***

Historically, nurse practitioners (NPs) and clinical nurse specialists (CNSs) have been authorized to bill the Medicare program and be paid directly for their professional services, while payment for physician assistant (PA) services must be made to the PA's employer. The payment amount for the services of PAs, NPs, and CNSs is equal to 80 percent of the lesser of the practitioner's



actual charge or 85 percent of the amount that would be paid to a physician under the MPFS. The regulation also specifies that a group of PAs that incorporate to bill for their services is not a qualified employer. Given the statutory requirement that CMS make payment to the PA's employer, PAs are precluded from directly billing the Medicare program and receiving payment for their services, and do not have the ability to reassign Medicare payment rights for their services to any employer, facility, or billing agent. The Consolidated Appropriations Act (CAA) of 2021 made amendments to remove the requirement to make payment for PA services only to the employer of a PA effective January 1, 2022. With the removal of this requirement, PAs will be authorized to bill the Medicare program and be paid directly for their services in the same way that NPs and CNSs do. CMS proposes updating its regulations to conform with the CAA provision.

### ***ACR Perspective and Comments***

**The ACR understands the need for equal treatment between PAs, NPs, and CNSs under CMS billing policy.** The ACR continues to believe that PAs, and other non-physician practitioners (NPPs) are valuable members of physician-led health teams. **The ACR would like to reiterate our concerns regarding the scope of practice of NPPs.** Any new policies that take major steps that move patient care away from a physician-led team and more towards allowing PAs and advanced practice registered nurses (APRNs) to work in independent practice are a concern for radiological care.

The ACR has three principles that apply to NPPs working in radiology practices. All NPPs should work under the direct supervision of a radiologist. Importantly, no NPP should ever be allowed to interpret images, and none are meant to be trained to work in independent practice. NPPs are not interchangeable with radiologists or other physicians. Physicians are highly educated and must complete between 10,000 and 16,000 hours of clinical education. In comparison, most APRNs are only required to complete between 500 and 720 hours of clinical training. Loosening CMS' national policies on the supervision of NPPs and more broadly deferring to state law and scope of practice could detract from quality patient care. For example, at the state level there are many laws that allow for APRN's to perform and interpret X-rays under general supervision. From a medical training and malpractice perspective, this is a dangerous path to take regarding quality patient care and patient safety.

To ensure safety and quality standards for radiology services, NPPs should practice under direct supervision of a physician. NPPs offer value in providing quality patient care. However, accurate diagnosis and treatment of disease and injury commonly depends on proper interpretation of imaging exams by highly trained radiologist physicians. CMS should not compromise quality patient care and safety by deferring solely to state law and scope of practices which vary widely from state-to-state.






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## **Physician Self-Referral Updates**

### ***Proposal***

CMS proposes to revise its Stark physician self-referral regulations relating to indirect compensation arrangements. Under the Stark statute, these arrangements involve an “unbroken chain” between the referring physician and the entity providing designated health services (DHS) of at least one individual or entity that has a financial relationship between them. Thus, each link in the chain must have an ownership or investment interest or compensation arrangement with the prior link. In these arrangements, the referring physician or immediate family member receives aggregate compensation from the individual or entity in the chain with which the physician or family member has a direct financial relationship that varies with the volume or value or referrals or other business that referrer generates for the entity furnishing the DHS. Additional factors regarding compensation must apply as well.

### ***ACR Perspective and Comments***

In 2020, CMS modified its test to determine whether an indirect compensation arrangement exists. It attempted to balance safeguarding against the risk of patient or program abuse or compromised program integrity, with granting more flexibility to industry participants. However, CMS inadvertently did not include in the definition of “indirect compensation arrangements”, a component of “unbroken chains” of compensation arrangements that it has targeted for years: certain arrangements with unit of service-based payment to rent office space or equipment.

Therefore, CMS proposed revising its regulation to include, as a potential indirect compensation arrangement, any unbroken chain of financial relationships in which the compensation arrangement closest to the physician, or immediate family member of the physician, involves compensation for anything other than services that they personally perform.

**ACR supports CMS’ proposal. We believe that it would reinforce CMS’ longstanding position that certain economic and clinical arrangements remain problematic for quality patient care.** Per-unit or per-service space or equipment rental might well compromise physicians’ decisions and lead to overutilization or patient steering. The ACR advocated in 2008 for CMS to restrict such arrangements in imaging and radiation therapy. CMS did so then in the fiscal year (FY) 2008 IPPS final rule. If CMS adopts its proposal in this MPFS rule, patients will benefit because the Government could enforce the Self-Referral Law against a wider array of compensation scenarios.

## **Telehealth**

### ***Proposal***

CMS created Category 3 telehealth services on a temporary basis in response to the COVID-19 PHE. Category 3 includes services for which CMS believes there is likely to be clinical benefit when furnished via telehealth, but there is not yet sufficient evidence to be Category 1 or 2. In an effort to collect sufficient evidence, CMS is proposing to retain all Medicare telehealth services added on a Category 3 basis until the end of CY 2023, to allow more time to collect information



on utilization of these services. CMS has found that audio-only E/M visits has been one of the most utilized services during the PHE, with most beneficiaries receiving mental health services. In response, CMS is proposing to define interactive telecommunications systems to include audio-only communications technology when used for telehealth services for the diagnosis, evaluation, and treatment of mental health furnished to established patients when the originating site is the patient's home.

Through the end of the year in which the PHE ends, CMS is allowing direct supervision to include immediate availability through a virtual presence using real-time audio/video technology. CMS is seeking comment on the extent to which this flexibility is being utilized during the COVID-19 PHE, and on whether it should be made permanent.

#### ***ACR Perspective and Comments***

The ACR recognizes the value of telehealth services, particularly in rural areas, and the extent to which they have been utilized during the PHE. The **ACR urges CMS to monitor health outcomes and utilization of imaging in telehealth.**

### **QUALITY PAYMENT PROGRAM**

#### **Updates to the Quality Payment Program (QPP)**

CMS introduces multiple requests for information (RFI) on areas that would impact traditional Merit-Based Incentive Payment System (MIPS) and future MIPS Value Pathways (MVPs) participation and seeks input on the following proposals.

#### **Advancing to Digital Quality Measurement and Use of Fast Healthcare Interoperability Resources (FHIR) in Physician Quality Programs**

##### ***Proposal***

The CMS RFI *Advancing to Digital Quality Measurement and the Use of Fast Healthcare Interoperability Resources (FHIR) in Physician Quality Programs* discusses transitioning CMS quality reporting and value-based purchasing programs to digital quality measurement (dQM) by 2025. The shift to dQM is an overarching initiative by CMS to modernize their "quality measurement enterprise" and maintain alignment with the Department of Health and Human Services' (HHS) encompassing strategy to promote data interoperability and access in conjunction with other federal agencies. For instance, the Office of the National Coordinator (ONC) for Health Information Technology (HIT) has finalized policies in the Cures Act regarding "complete access, exchange, and use of all electronically accessible health information."

#### ***ACR Perspective and Comments***

The ACR supports the concept behind CMS' adoption of FHIR to reduce the collection and analysis burden imposed by current electronic clinical quality measures (eQMs). **However, we request a delay to the aggressive 2025 transition deadline.** We encourage the use of the data collection structure and single terminology to obtain eQM data. We urge CMS to propose





guidance for measure developers, vendors, and other stakeholders to inform the necessary details to transition to FHIR-based eQMs. For instance, which version of FHIR would vendors implement, what degree of complexity is expected of the FHIR queries, and what type of subject matter expertise is needed to engage in the transformation successfully (i.e., ensuring technical specifications capture the required data elements to assess performance)?

The ACR anticipates translating radiology eQMs to dQMs will be complex. While most data elements may be extracted from electronic health record systems, much of it lives in non-structured data fields that lack the necessary standardized terminology for translation required of FHIR resources. It is possible to do the translation but prioritization of resources to do such will likely be at issue. We are encouraged by the intention for dQM to contain language that would process digital data for determining measure scores, thereby promoting quality feedback reports more rapidly. Such rapid performance feedback would inform practices with data for making “actionable” improvements in care as immediately as possible. The prompt receipt of performance reports and the proposal to redesign quality measures as “self-contained tools” using dQM software incorporates end-to-end measure calculation solutions would make participation in quality programs, including MIPS, seamless.

The ACR is interested in learning more about CMS' plan for prioritizing components that would support the dQM portfolio, like measurement topics, measure development/digitization requirements, and data standards. We also request more information regarding dQM criteria; this would clarify the expertise required by measure developers and stewards for developing and digitizing measures for the eventual transition. **Given the complexities of transitioning to dQM, the ACR recommends that CMS delay the timeline for complete dQM transition at least until two years after the end of the PHE and to allow for greater availability of information and guidance for stakeholders.**

### **Closing the Health Equity Gap in CMS Clinician Quality Programs**

#### ***Proposal***

CMS’ RFI on *Closing the Health Equity Gap in CMS Clinician Quality Programs* is consistent with the executive order on Advancing Racial Equity and Support for Underserved Communities through the Federal Government, CMS issued an RFI from stakeholders to achieve health equity for all patients by implementing new policies.

CMS proposes the following changes regarding the Complex Patient Bonus.

- Limiting the bonus to clinicians with a median or higher value for at least one of the two risk indicators (Hierarchical Condition Category and dual proportion).
- Updating the formula to standardize the distribution of two risk indicators so that the policy can target clinicians who have a higher share of socially and/or medically complex patients.
- Increasing the bonus to a maximum of 10 points.



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***ACR Perspective and Comments***

The ACR applauds CMS' initiative on improving the health equity gap across its quality programs and including its clinician quality programs. Health care inequities are prevalent, as emphasized by the continuing COVID-19 PHE. CMS is using a definition of equity as described in the recent Executive Order that identifies systemic racism as the basis for differences in health outcomes between socially defined racial groups nationally. We agree with CMS' plan to transparently provide health disparity data by integrating information presented in existing CMS reports and tools (e.g., CMS Mapping Medicare Disparities Tool, Rural-Urban Disparities in Health Care in Medicare Report, etc.). By including this information in the context of the reports in which stakeholders are already familiar, improvements to close health equity gaps may be more quickly implemented by practices.

We encourage CMS to carefully standardize demographic data collection across quality programs and measures while retaining key current elements that serve as proxy demographic data until a fuller set of demographic data is standardized for capture in measure data sources. We agree that a method for reporting health equity performance results across multiple measures would illustrate a narrative for informing MIPS eligible clinicians on the disparities in their care. However, we emphasize that the desired new or additional data elements captured should not negatively influence the clinical workflow, increase the burden of quality measure data collection, or duplicate other similar data collection programs.

The ACR agrees with including improvement activities in MIPS that address creating and implementing anti-racism plans. We anticipate that activities like this could trigger the other CMS quality measurement program participants (e.g., facility-level program) to detail anti-racism strategies for their specific level of measurement.

We recognize that radiologists are well-intentioned regarding providing high-quality, equitable care; and find that the proposed MIPS improvement activity acknowledges practices' insufficiency of formal plans for gathering and analyzing data by race and documenting disparities by different population groups. The ACR is interested in working with our stakeholders to revise existing activities and measures to address the health equity gap. The ACR recommends modifying the measures and activities to include specifications linking them to closing the health equity gap. However, we stress the importance of retaining the original measure's action or core activity without solely shifting their focus on health equity.

The ACR also supports the proposed revisions regarding the complex patient bonus calculation methodology. We are encouraged by program flexibilities which award additional points to clinicians with a higher percentage of *medically* and *socially* complex patients and do not lower the standard of care.






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## **Transforming MIPS: MIPS Value Pathways**

### ***Proposal***

As part of CMS' transition from traditional MIPS to MVPs, the proposed rule includes a comprehensive set of policies and procedures that inform the sunset of traditional MIPS and MVP implementation and scoring (including category reweighting) of MVPs for eligible clinicians participating in MIPS (as individuals and groups). CMS maintains that MVPs would be incrementally added to the QPP upon availability as part of rulemaking. Traditional MIPS would sunset once there is a comprehensive inventory of MVPs for all eligible clinicians to participate. CMS highlights that stakeholders largely support the MVP Framework goals.

Using MVPs, CMS anticipates collecting more granular level data on measures and activities for a specific medical specialty, condition, episode of care, or procedure. Therefore, clinicians would receive performance feedback reports that immediately inform a practice's strengths and weaknesses, thereby designating distinct areas for care improvement by practice.

### ***ACR Perspective and Comments***

ACR applauds the efforts associated with CMS creating a pathway for MIPS eligible clinicians participating in MVPs to receive their MIPS performance feedback more granularly and rapidly, thus, granting the opportunity for these clinicians to make precise changes to their practice that expediently improve patient care. **However, we request clarification on conflicting proposals included in the rule that suggests otherwise.**

In the section titled, "Proposed Enhanced Performance Feedback in MVPs," CMS acknowledges the importance for MIPS participating clinicians to "receive more timely and actionable feedback during the performance period." The proposed rule further states that CMS' process to pursue the receipt of such timely feedback is complex and would require several solutions for this to be enabled. For instance, accessing the data and sharing performance feedback requires clinicians to submit data earlier to provide the enhanced performance feedback during the performance period - necessitating significant investments in time and money for CMS, third-party intermediaries, and clinicians. The ACR is concerned that the transition to dQM misaligns with efforts to provide enhanced performance feedback in MVPs. In other words, resources that could support solutions for third-party intermediaries and CMS to provide the enhanced feedback are uncoordinated with the dQM transition efforts. Unfortunately, this misalignment between these performance feedback initiatives could hinder medical specialties' transition to dQM.

We appreciate CMS' efforts in working with stakeholders, like medical professional societies, regarding proposed MVPs before they are subject to rulemaking. By doing this, CMS acknowledges the vital role that medical specialty societies play in organizing subject matter expertise for providing input on MVP development for their medical specialty. The ACR is in the early phases of MVP conceptualization. We request clarity on the following.

The limitations in traditional MIPS that most radiologists face prevent them from earning scores for the Cost and Promoting Interoperability performance categories. Therefore, most radiologist



participants' scores are reweighted to the Quality and Improvement Activities performance categories. We are cautious about future radiology-focused MVPs that comprise the complete set of promoting interoperability measures and episode-based cost measures. We are concerned by CMS' assumption that radiology-focused MVPs should comprise all promoting interoperability and population-based cost measures. However, most MIPS radiology participants have been excluded from being scored on these measures. As such, we question CMS' objective in completing MVP transition from traditional MIPS as early as the performance year 2028.

Furthermore, we welcome CMS' proposal for external entities to develop episode-based cost measures, since until now, CMS has supervised their development solely through its contractors. The ACR recognizes this as a step in the right direction by acknowledging that stakeholders can develop cost measures unique to their specialty, possibly bolstering the broader episode-based cost measures included in MIPS. However, diagnostic radiology does not readily fit into episode-based care models. Given these radiologists' role as consultants to referring clinicians, they collaborate with patients' treatment teams by providing imaging results and care recommendations as a part of an episode. They do not own condition or procedure-based episodes the way pulmonologists or cardiologists do. MVPs would better serve radiology practices and patients by measuring imaging costs against a national radiology spending benchmark determined for a particular condition, like lung cancer. The ACR urges CMS to consider non-episode-based cost measures for development by stakeholders and their inclusion in future MVPs.

**We caution CMS with sunseting traditional MIPS until CMS demonstrates that MVP reporting has proven effective and meaningful for a specific medical specialty and there is buy-in by those MVP participants.** Feedback from radiologists indicates low acceptance regarding the benefits of MVP reporting. There may be a limited inventory of meaningful radiology quality measures proposed available for inclusion in future MVPs due to the number of ACR measures on the topped-out measure cycle (including two proposed for removal this year).

### **MVP and Subgroup Implementation Timeline**

#### ***Proposal***

MVPs proposed for adoption in this rule are unavailable for reporting *voluntarily* until the performance year 2023. CMS anticipates that *mandatory* reporting of MVPs would not begin before MIPS performance year 2028. Within this proposed rule, CMS also details the implementation timeline and other considerations for subgroup reporting. Beginning in MIPS performance year 2023 through 2024, CMS proposes that recognized groups begin voluntarily forming subgroups and participating in MVPs. Subgroups would comprise a subset of MIPS eligible clinicians who share the same medical specialty-type within their groups' practice. Participation in MVPs through subgroup reporting would allow each MIPS eligible clinician to receive feedback from CMS on the care they are directly attributed, providing the opportunity for all clinicians in a multispecialty practice to make data-driven improvements on the quality of care provided.





CMS further proposes that beginning in MIPS performance year 2025, multispecialty groups must form subgroups to report MVPs.

### ***ACR Perspective and Comments***

The ACR agrees with CMS that the proposed subgroup reporting option is essential for those in MIPS reporting under a multispecialty group. To date, multispecialty groups report the same set of measures, which are often irrelevant and/or lack meaning to a portion of specialists. For instance, radiologists who participate within a multispecialty group are unable to use MIPS measure performance feedback to improve patient care because the measure set chosen by the practice does not reflect the care that they provide.

We are uneasy with CMS' ambitious timeline for multispecialty groups' mandatory reporting as subgroups in MVPs beginning in 2025. As previously stated, radiologists and MVP developers face obstacles with the Cost and Promoting Interoperability performance categories. MVP developers are to some extent limited in developing a radiology MVP that meets the criteria for rulemaking. The ACR is uncertain of the MVP(s) that may become available for radiologists required to participate as a subgroup under their multispecialty group. **Should a radiology MVP not be available when multispecialty subgroup reporting becomes mandatory, how would those multispecialty group participants excluded from an MVP be scored in MIPS?**

### ***Proposal***

CMS outlines several methods for potential restrictions on subgroup composition such as limiting to a subgroup of clinicians of the same or related specialty or a threshold of 75% of eligible clinicians in a subgroup be of the same or related specialty; or limiting by practice location, clinical setting, patient population or scope of care provided by a subgroup.

CMS further proposes that determination for special statuses, i.e., low volume threshold or non-patient facing status continue to be determined at a group level and not allow a special status designation at the subgroup level, even if a subgroup is eligible for special status designation.

### ***ACR Perspective and Comments***

CMS' rationale for the restriction on subgroup special status designation is that it would deter construction of subgroups that would inappropriately create special status determination such as a subgroup of 15 or fewer eligible clinicians. The ACR recognizes there could be scenarios in which a subgroup with a low volume threshold special status could be inadvertently created or even purposefully designed to carry the associated exemptions. However, it does not follow that intentional crafting of a radiology subgroup to create special status exemptions would occur. If CMS implements the subgroup limitation of same/related (or 75% threshold same/related) specialty composition and disallows special status designation and associated exemptions, that will place a radiology subgroup in a position of needing to meet requirements for all four MIPS categories, when it is known that most radiologists will not have Cost and Promoting Interoperability measures (or Quality population health measures) attributable to them. The ACR




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strongly recommends that CMS not implement the single specialty subgroup composition limitation and allow special status designation to carry through to a subgroup.

Additionally, the ACR believes that subgroup composition would not benefit from the constraints that CMS proposes, particularly the limitation to a single specialty but also based on other factors such as geographic location or practice setting. This restriction would inhibit a multi-specialty group's clinical team from forming a subgroup for a clinical condition- or episode-based MVP such as stroke care. Such patient care requires multi-disciplinary involvement – neurologists, cardiologists, emergency physicians, neuroradiologists, etc. – to provide patient-focused quality care. That condition and patient focus is one of the guiding principles of the MVP framework. Also, if each specialty in a multi-specialty group were required to form separate subgroups to participate in such a condition-focused MVP, radiologists may be unfairly impacted due to the non-patient facing special status removal and the associated exemption/reweighting allowed for Cost and Promoting Interoperability. In contrast, radiology groups or other specialty groups with their own distinct Taxpayer Identification Numbers (TINs) who have special status designation would retain that determination and exemptions when participating in the same condition-based MVP. As such, we strongly support CMS' special status determination for non-patient-facing MIPS eligible clinicians and rural or small practices be carried through to subgroup reporting and recommend that CMS encourage multispecialty groups to form subgroups to achieve the desired patient outcomes of the MVP without additional artificial reporting barriers. The ACR would like to engage in dialogue with CMS so that MVP development, implementation, and adoption are seamless in capturing the performance of all radiologists despite their degree of patient engagement, practice size, or location. The ACR is interested in accurately demonstrating the essential role that radiologists provide patients and the impact on care value.

### **Selection of Measures and Improvement Activities Within an MVP**

#### ***Proposal***

Since its introduction in the CY 2018 QPP final rule, CMS highlighted the role of MVPs in reducing MIPS participation burden by lowering the MIPS reporting requirements. Within this rule, CMS is proposing participation requirements for MVP reporting. The following details the components as they would apply to participating radiologists.

Proposed requirements necessitating MVP participant action—

- *Quality Performance Category*: If applicable, four quality measures, including an outcome measure or high-priority measure (in the absence of an outcome measure).
- *Improvement Activities Performance Category*: Attestation of one high-weighted activity or two medium-weighted activities.
- *Promoting Interoperability Performance Category*: Report all Promoting Interoperability measures.






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Proposed requirements for which CMS is responsible—

- *Cost Performance Category*: CMS automatically determines according to the administrative claims information. No additional data submission by the MVP participant is required by CMS.
- *Quality Performance Category—Population Health Quality Measure*: Administrative-based claims quality measure focused on public health priorities

### ***ACR Perspective and Comments***

The ACR appreciates the level of detail included in the proposed requirements for MVP participation. Previously, CMS stated the requirements would be reduced when compared to traditional MIPS. Due to the details in the proposed rule, participating radiologists can recognize MVPs' role in reducing MIPS participation burden. The ACR supports CMS' reduction of participation requirements for the Quality and Improvement Activities Performance categories. Provided that MVPs applicable to radiology care become available, submitting data for four quality measures and no more than two improvement activities (according to their assigned weight) are strongly preferred.

The ACR urges CMS to adopt flexibilities for non-patient-facing clinicians, like diagnostic radiologists, as they likely would be unable to collect data for promoting interoperability measures that apply to patient-clinician encounters. Moreover, we recognize that the proposed inclusion of administrative claims-based population health measures would not add to MIPS participants' quality reporting burden. However, we are very concerned that no population health quality measures are attributable to radiologist care. As such, we encourage CMS to implement scoring flexibilities that prevent penalizing MVP participants' Quality Performance category scores due to the lack of applicable claims-based population health measures.

### **Public Reporting of MVP Data**

#### ***Proposal***

CMS proposes that for individuals, groups, and subgroups participating in MVPs, there will be a one-year delay on publicly reporting new Improvement Activities and Promoting Interoperability measure performance. CMS believes that this will encourage clinician participation in MVPs while also allowing them to transition into the new framework. CMS further emphasized that subgroup performance will maintain a separate workflow from traditional MIPS and MVP group public reporting. In other words, MVP subgroup reporting data will be linked to the practices' Care Compare profile page, where it would describe who is attributed to the subgroups' performance.

#### ***ACR Perspective and Comments***

The ACR requests clarification on the public reporting proposals included in the rule. As previously described, we are unaware of how ready radiologists practicing in a multispecialty group would be by 2025 to form a subgroup and participate in an applicable MVP. As such, it is unclear to us how publicly reporting performance data on Care Compare for some but not all



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clinicians in a multispecialty practice would impact those without available MVPs. The ACR requests that CMS ensure details are provided on the Care Compare website that explains (in a user-friendly manner) why particular specialists within the multispecialty practice do not have quality data published to the site and what this means about the care that these specialists provide.

### **Facility-Based Measurement**

#### ***Proposal***

CMS is proposing changes to determine the final score for clinicians and groups eligible for facility-based measurement. Beginning with the 2022 performance year, the MIPS quality and cost performance category scores will be based on facility-based measurement unless the facility-based clinician or group MIPS final score is higher through another MIPS submission method. This proposal would calculate two final scores for clinicians and groups who are facility-based: one for the clinician or group's performance and the weights of the performance categories if facility-based measurement did not apply, and another based on the application of facility-based measurement. CMS will accept the higher of the two scores.

#### ***ACR Perspective and Comments***

The ACR appreciates CMS' diligence in addressing this error with facility-based measurement. We agree that the higher of two scores should be used when determining the final score for clinicians and groups eligible for facility-based measurement.

### **MIPS: Claims Reporting for Small Practices**

#### ***Proposal***

CMS proposes to require that claims-reporting small practices who wish to submit MIPS data as a group must signal their intention to participate as a group by submitting either improvement activities, promoting interoperability measures, or MIPS clinical quality measures (CQMs) as a group. If they do not report at least one performance category as a group, they will be considered individual submitters.

#### ***ACR Perspective and Comments***

The ACR supports this proposal and believes that it will prevent cases of clinicians receiving group scores when that is not the reporting intention.

### **MIPS: Quality Measure Scoring**

#### ***Proposal***

CMS has proposed to raise the scoring floor for new, non-benchmarked measures from three to five points during their first two years in the MIPS program. CMS also proposes to award zero points to a non-benchmarked measure if it remains non-benchmarked beyond this two-year period.






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### ***ACR Perspective and Comments***

The ACR supports CMS' proposal to raise the scoring floor to five points for new measures in the program; however we strongly suggest extending this grace period to four years rather than two years. We believe that a five-point score will increase participation in new quality measures, but we also acknowledge that it takes time for clinicians and practices to adopt new measures. As stewards of MIPS measures and developers of Qualified Clinical Data Registry (QCDR) measures, we know firsthand that it can be a struggle to submit new measures. Recognizing that valuable practice resources are necessary to begin using new measures, many practices are disincentivized to submit non-benchmarked measures that may only receive a minimum default score. Not only are technical and administrative resources required to begin abstracting the data for new measures, but using new measures also affects the radiologists' workflow and requires time for changes to be implemented. The ACR is also concerned with how this policy will be adopted for measures new in 2020 and 2021 which have had a low adoption rate due in large part to the COVID crisis. Both performance years allowed automatic exemption for non-reporters; therefore, it is possible that new measures implemented within that timeframe may show low adoption rates and fall below the threshold for benchmarking. For these reasons, we strongly encourage CMS to expand the proposal to a four-year grace period. This would prevent premature removal of meaningful measures from the program.

### **MIPS Quality Performance Category: Removal of Bonus Points**

#### ***Proposal***

CMS proposes to end the practice of awarding bonus points for additional high priority or outcome measures.

#### ***ACR Perspective and Comments***

The ACR strongly opposes the proposal to eliminate bonus points from the quality performance category. We believe this proposal would unfairly penalize specialties such as radiology who already have a small pool of reportable, benchmarked measures, many of which are capped at seven points, and may make it nearly impossible for some practices to reach the neutral performance threshold of seventy-five points. If a practice is only able to report topped-out measures, even if receiving seven points for perfect performance, there is potential to receive a negative adjustment.

The ACR also believes that the bonus point policy benefits the entire MIPS program. The prospect of receiving bonus points encourages use of non-benchmarked measures and incentivizes practices to submit more complete data. This contributes to more robust benchmarking for all quality measures and faster adoption of new measures. The ACR strongly believes that practices should continue to be awarded for going above and beyond in their quality reporting.




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### **MIPS: Quality Measure Data Completeness**

#### ***Proposal***

CMS proposes to maintain the data completeness threshold of 70% through 2022, but to increase it to 80% for the 2023 MIPS performance period.

#### ***ACR Perspective and Comments***

The ACR appreciates that CMS wishes to maintain the data completeness at 70% through 2022. However, we would suggest a more incremental approach to raising data completeness in future years. The ACR believes that small and rural practices will find it difficult to reach 80% data completeness, therefore we suggest maintaining the completeness threshold at 70% for a longer period. Additionally, during the PHE much of quality reporting work was postponed, delaying integration of additional locations or data sources into the collection process. There should be a window of time following lifting of the PHE to allow practices to catch up on expanded reporting. **ACR also requests that CMS clarify what they view to be the future upper bound of data completeness for quality reporting. Assuming 100% will never be feasible, does CMS expect 80% to be the ultimate goal for data completeness?**

### **MIPS: Quality Measures Proposed for Removal**

#### ***Proposal***

CMS has proposed to remove the MIPS quality measures #195: *Stenosis Measurement in Carotid Imaging Reports* and #225: *Reminder System for Screening Mammography*.

#### ***ACR Perspective and Comments***

The ACR strongly opposes the removal of these measures, and we believe they continue to contribute to improving standards of care. Measure #195 continues to be endorsed by the National Quality Forum. During the most recent National Quality Forum Neurology Committee Standing Committee endorsement period, ACR staff examined the performance and patient volume data from MIPS participating radiologists. When comparing it to the claims data for exams that included the type of imaging included in this measure denominator, ACR staff discovered a variation between those who submitted this measure and those who could have submitted it but did not. In other words, there is a portion of eligible radiologists who selected not to use this measure.

Given the adoption disparities with measure #195 the ACR strongly recommends that CMS remove its topped-out status and begin working with stakeholders to identify solutions for engaging those eligible radiologists to use it and reduce disparities in this area.

Measure #225 is currently the only MIPS measure applicable to dedicated breast imagers following removal of numerous applicable measures from the program. The ACR also notes that data in publications has shown lower return to screening by patients during the COVID crisis, particularly in safety-net hospitals and under-served, rural and minority populations. See, for example, the article [“Trends in Breast Cancer Screening in a Safety-Net Hospital During the](#)





COVID-19 Pandemic”, which was published in JAMA on August 6, 2021. We are also concerned that the removal of measure #225 from MIPS may make it more difficult to create a potential mammography MVP in the future, as this MVP would certainly rely on existing MIPS mammography measures when establishing quality scoring. We strongly believe there is value in maintaining both measures in the MIPS program.

More generally speaking, **the ACR strongly advises that CMS redefine topped-out measures by expanding the definition to include analysis of participation rates for a particular measure, rather than just the percentage of those who perform and their scores. We have found that this would help address closing the health equity gap.**

### **MIPS: Reweighting Policy for Small Practices**

#### ***Proposal***

CMS proposes to change the reweighting percentages for small practices that are exempt from both the promoting interoperability (PI) and cost categories. With this new proposal, a group or individual from a small practice who is exempt from PI and cost would have their quality category weighted at 50% and their improvement activities category also weighted at 50%. Practices who are exempt from PI only would have quality weighted at 40%, improvement activities (IAs) weighted at 30% and cost weighted at 30%.

#### ***ACR Perspective and Comments***

The ACR supports this proposal but suggests it be similarly applied to all practices. With the new performance threshold proposed at seventy-five points and many measures being capped at seven points, it is becoming increasingly difficult for groups to obtain even the neutral adjustment when the quality category is weighted so highly. Most radiologists are non-patient-facing and exempt from PI and cost, indicating the need for a broader application of CMS’ proposal.

### **MIPS: Cost Performance Category**

#### **Performance Category Reweighting**

#### ***Proposal***

CMS is seeking comments on additional circumstances that may limit the ability to reliably calculate cost measure scores to adequately capture and reflect performance (such as external factors beyond the control of MIPS clinicians and groups), and that may inform the decision to reweight the cost performance category to provide scoring flexibility in the future.

#### ***ACR Perspective and Comments***

The ACR encourages CMS to continue monitoring the PHE throughout 2021 and provide category reweighting of 0% towards the final MIPS score if clinicians are adversely affected by the PHE.




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### **Proposed New Cost Measures**

#### ***Proposal***

CMS is proposing to add five new episode-based cost measures in the 2022 performance year and beyond: Melanoma Resection, Colon and Rectal Resection, Sepsis, Asthma/Chronic Obstructive Pulmonary Disease (COPD) and Diabetes.

#### ***ACR Perspective and Comments***

The ACR commends CMS and its contractor, Acumen, for developing these new cost measures. The measure development process has been transparent and efficient, with various stakeholders involved in several different committees. ACR members have been involved in some of the Acumen committees and have no objections to these five proposed measures.

### **Cost Measure Development**

#### ***Proposal***

CMS is interested in creating a process for stakeholders to develop cost measures. To ensure new cost measures align with program needs, CMS will conduct an environmental scan to outline priority areas and clinical performance gaps. Similar to the Call for Quality Measures, CMS would conduct a Call for Cost Measures and review all candidate measures through the Measures Under Consideration (MUC) process. Candidate measures must be fully specified, feasible, and scientifically acceptable. CMS is requesting feedback on this proposal, as well as specialties or specific conditions that would support future or proposed MVPs.

#### ***ACR Perspective and Comments***

The ACR strongly agrees with allowing stakeholders to submit candidate cost measures to CMS through a Call for Cost Measures. The ACR encourages CMS to convene a group of stakeholders from various specialties to outline priority areas and performance gaps within cost measurement. CMS should provide more guidance on developing cost measures and the pre-requisites on specifications and testing. It would be helpful to have a document, like the Measures Management System (MMS) Blueprint, to assist measure developers with cost measurement development methodology and specifications.

Regarding future cost measures, the ACR suggests developing a breast cancer screening episode-based measure that encompasses screening mammography through cancer diagnosis or return to annual screening. This episode is almost entirely under the radiologist's direct oversight, making it feasibly attributable to a radiology group. There are well-established quality metrics that breast imaging physicians use that could be linked to this cost measure as an MVP. Previously included in MIPS as QCDR measures, cancer detection rate, recall rate, and true/false positive rates would be a fair balance to a breast cancer screening (BCS) cost measure. The ACR would advocate reintroducing these to MIPS, linked to a BCS cost measure. This suite of measures, including a cost measure, could provide a comprehensive view on the quality and efficiency of diagnostic care in this area to the benefit of patients and could potentially be a candidate for a CMS MVP.





A significant challenge that radiologists confront is a lack of opportunity to be recognized for care coordination and the inability to be rewarded for team-based care led by radiologists. Management and care coordination of imaging incidental findings, incorporating both prevention of unnecessary or repeat testing and assurance that evidence-based follow-up recommendations are completed, are concepts worthwhile to explore as cost measures for radiology. Across an incidental finding episode, prevention of low-value follow-up testing, or a “null event” may be assessed as part of the full episode, like a low back pain episode-based cost measure for orthopedics, where surgery was avoided, and costs attributed would be limited to evaluation and management codes. For example, an abdominal CT incidental-finding episode may begin with the CT exam, carry through any downstream management or referrals to specialists, and compare costs of the episode when radiologist recommendations stated “no follow-up necessary” to cases where radiologist guidance was not explicit. Overdiagnosis of benign incidental findings places patients at risk for anxiety and unnecessary harm from diagnostic procedures and treatment. A standardized approach to managing incidental findings is desirable to reduce practice variation, decrease costs, limit the potential for harm from unnecessary therapies (biopsies or surgeries) and alleviate unnecessary patient and physician anxiety. Additionally, MIPS quality measures focused on incidental finding-appropriate recommendations currently exist, providing an opportunity for balance with cost measure(s) for this concept.

### ***Proposal***

CMS would like to establish criteria for evaluating cost measures for substantive changes. Examples of changes to measures include service codes, types of costs, measure elements and risk adjustment methodologies. CMS requests public comment on this proposal.

### ***ACR Perspective and Comments***

The ACR agrees that there should be a transparent process for evaluating substantive changes to cost measures, similar to quality measures. A contractor may facilitate this process more easily. Service codes and measure elements should be reviewed on an annual basis. Substantive changes, such as risk adjustment methodologies, must be put in the proposed rule for stakeholder comment.

## **MIPS: Improvement Activities Performance Category**

### **Call for Improvement Activities**

### ***Proposal***

In 2020, CMS finalized an exception to the Call for Improvement Activities timeline, allowing stakeholders to submit an improvement activity nomination at any time during a PHE. CMS is proposing to revise that exception; all nominations during a PHE must be submitted by January 5 of the activity implementation year.

### ***ACR Perspective and Comments***

The ACR has no objections to this proposal.




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### ***Proposal***

CMS is proposing two new criteria for candidate improvement activities: they should not duplicate other improvement activities and should drive improvements that go beyond standard clinical practice. To increase the chances of an improvement activity's acceptance to the program, CMS is proposing that the six previously established factors for submissions should be optional factors beginning in 2022: alignment with patient-centered medical homes, support for the patient's family or personal caregiver, responds to a public health emergency as determined by the Secretary, addresses improvements in practice to reduce health care disparities, focus on meaningful actions from the person and family's point of view, and representative of activities that multiple individual MIPS eligible clinicians or groups could perform.

### ***ACR Perspective and Comments***

The ACR agrees with CMS that this proposal will increase the chances of an improvement activity's acceptance to the program. The ACR requests that CMS clarify what is considered "standard clinical practice", so stakeholders can better understand improvement activity requirements.

## **MIPS Performance Categories That Must Be Supported by Third Party Intermediaries**

### ***Proposal***

CMS proposes that beginning with the 2023 MIPS performance period, QCDR and qualified registries must support MVPs that apply to the MVP participants on whose behalf they submit MIPS data. QCDRs and qualified registries may also support the APM Performance Pathway (APP).

### ***ACR Perspective and Comments***

We anticipate that ACR's QCDR, the National Radiology Data Registry (NRDR) MIPS Portal, would be capable of supporting applicable MVPs as they become available. As part of our QCDR self-nomination for the calendar year 2022, the ACR is requesting to jointly license a subset of QCDR measures with other QCDRs appropriate for radiology. We anticipate that engaging in this type of measure sharing would prepare ACR with the capacity to support MVPs with QCDR measures from other radiology-focused QCDRs.

Considering the language used in the proposed rule that communicates explicitly that QCDRs would be required to support MVPs by 2023, we request clarification of the proposed requirement regarding QCDRs supporting the APP. **Is the expectation that QCDRs would support APP participation through QCDRs beginning in 2023, as well?** The ACR is concerned that although the set of APP quality measures includes MIPS CQMS, these are not measures that our QCDR would typically support, given the measures' topic areas and unlikely participation by radiologists. As such, the ACR is uncertain of the resources required for supporting these MIPS CQMs in our registry and whether there would be any return on investment associated with supporting the APP quality measure set.






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### **QCDR Not Approved or Not in Good Standing**

#### ***Proposal***

CMS proposes that for QCDRs to use QCDR measures stewarded by another QCDR, CMS must approve the QCDR measure during the self-nomination process. Therefore, QCDRs stewarding the measures subject to inclusion in another QCDR must be approved and in good standing with CMS.

#### ***ACR Perspective and Comments***

**The ACR requests clarifications to this proposal.** Our concerns apply to those QCDR measure stewards whose entities no longer support a QCDR for various reasons, excluding CMS termination or poorly specified QCDR measures. The ACR disagrees that QCDR measures become invalid if the QCDR from which they originated is dormant. There are instances when dormant QCDRs maintain the former QCDR measures in their clinical quality data registry. Continuing to include the measure for quality improvement projects would require the measure to be maintained by the measure steward. These measures would likely continue to be approved during self-nomination had the entity submitted a QCDR self-nomination. **The ACR urges CMS to consider that QCDR measures remain available for inclusion in another QCDR. We also find that it is essential that QCDR measure stewards who no longer wish to maintain QCDR measures make reasonable efforts to transition them to an appropriate steward.**

### **QCDR Measure Testing Requirements for Calendar Year 2023 and Beyond**

Having sufficient quality measures available for radiologists is a top priority of the ACR's measurement strategy experts. It is necessary to develop a subset of radiology QCDR measures prior to submitting them to the Measures Under Consideration pre-rulemaking process for eventual adoption into MIPS. We appreciate CMS' intention to balance the volume of MIPS CQMs with QCDR measures when approving candidate MVPs. As a result, the ACR finds it essential that CMS return to the less restrictive MUC process performed before 2017. Over the last four years, the number of measures approved via the MUC has declined precipitously from several dozen measures to four quality measures last year. Combined with measure attrition, radiology groups' availability of quality measures to report has become increasingly limited. **CMS should reinstitute the MUC process that ensued before 2017 to support a more extensive inventory of radiology-focused MIPS measures, thereby encouraging the ACR and other radiology QCDRs to submit QCDR measures through the MUC process.**

The ACR is aware that efforts to expand the inventory of radiology quality measures would be challenging due to requirements by CMS regulation. We are very concerned about CMS' QCDR measure testing policy scheduled for 2023 and beyond. Per the calendar year 2021 QPP final rule, CMS determined it sufficient for QCDR measures submitted for use in the QPP performance year 2022 to undergo face validity testing to be approved. However, for QCDR measures approved for use in 2023 (and beyond), CMS requires "full testing." Given the methods for "fully testing" measures, the ACR faces limitations to the extent we may test several



measures mainly because there is no immediate incentive for routine practices participating in our QCDR to participate in this testing. Ultimately, it is unlikely that we could collect the volume of data necessary to demonstrate empirical validity for many of the newer measures within the CMS designated time.

We recognize that CMS intends to implement the testing requirements over the next year. We believe that “fully” testing more than a dozen QCDR measures on data that is not readily accessible will not be feasible even with this time lag. In 2020 and again in 2021, CMS rightly allowed groups disrupted by the COVID-19 pandemic to apply for and receive a hardship exemption. That policy, however, reduced the amount of data available for QCDR measure testing. **Because the extreme and uncontrollable circumstances policy decreased the number of groups reporting to MIPS via our QCDR, or the measures that were reported, we request that the measure testing requirements (excluding face validity testing) be delayed until two years after the PHE ends.**

Moreover, CMS proposes several changes to MIPS that would transform measure development and testing in the next five to ten years. CMS has an opportunity to align measure testing with its more significant priorities regarding digital quality measurement, health equity, and the implementation of MVPs. The ACR urges CMS to gradually implement this testing policy over two years following the expiration of the PHE and work with individual measure stewards on prioritizing measures and identifying the appropriate measure testing methods per measure. The ACR is also concerned by CMS’ timeline for migrating to digital quality measurement, specifically, if stratifying measures by socioeconomic, racial, and ethnic characteristics, as this could complicate measure testing. Requiring “fully tested” measures by 2023 is unlikely to meet CMS’ expectations.

In addition to CMS delaying measure testing beyond the PHE by two years, the ACR recommends that medical specialty society QCDR measure stewards proactively share testing plans for CMS review, resulting in feedback for achieving approval. Further, the ACR recommends that measures undergo this degree of testing once unless a measure is substantively updated. Therefore, such testing should be required to ensure that the revised measure retains its scientifically acceptable standards. The ACR encourages that CMS develop a consistent evaluation method of measure testing data, including those responsible for reviewing the methods and results, guidance regarding CMS’ determination of insufficient data, and the availability of an appeals process. The ACR also encourages CMS to promote a broad-based improvement activity that would provide MIPS practices the opportunity for earning MIPS points for participating in their respective QCDR’s measure testing process. Such an improvement activity would ensure that practices participate in QCDR measure testing, incentivize their participation in MIPS, and satisfy the requirement for QCDR measures to be “fully tested.”





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**Conclusion**

The ACR appreciates the opportunity to provide comments on the CY 2022 MPFS proposed rule. We encourage CMS to continue to work with physicians and their professional societies through the rulemaking process in order to create a stable and equitable payment system. The ACR looks forward to continued dialogues with CMS officials about these and other issues affecting radiology and radiation oncology. If you have any questions or comments on this letter or any other issues with respect to radiology or radiation oncology, please contact Angela Kim at 800-227-5463 ext. 4556 or via email at [akim@acr.org](mailto:akim@acr.org).

Respectfully Submitted,

A handwritten signature in black ink, which appears to read "William T. Thorwarth Jr.", is written over a horizontal line.

William T. Thorwarth Jr., MD, FACR  
Chief Executive Officer

cc: Carol Blackford, CMS  
Ryan Howe, CMS  
Tamara Syrek Jensen, CMS  
Joseph Hutter, MD, CMS  
JoAnna Baldwin, CMS  
Gift Tee, CMS  
Sara Fulton, CMS  
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Gregory N. Nicola, MD, FACR, Chair, ACR Commission on Economics  
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September 13, 2021

The Honorable Chiquita Brooks-LaSure  
 Administrator  
 Centers for Medicare & Medicaid Services  
 7500 Security Blvd  
 Baltimore, MD 21244

***RE: CMS-1751-P, Medicare Program; CY 2022 Payment Policies under the Physician Fee Schedule and Other Changes to Part B Payment Policies; Medicare Shared Savings Program Requirements; Provider Enrollment Regulation Updates; Provider and Supplier Prepayment and Post-payment Medical Review Requirements***

Dear Administrator Brooks-LaSure:

On behalf of our nearly 5,000 member hospitals, health systems and other health care organizations; our clinician partners — including more than 270,000 affiliated physicians, 2 million nurses and other caregivers; and the 43,000 health care leaders who belong to our professional membership groups, the American Hospital Association (AHA) appreciates the opportunity to comment on the Centers for Medicare & Medicaid Services' (CMS) physician fee schedule (PFS) proposed rule for calendar year (CY) 2022. **We appreciate CMS' proposals in this rule that support care delivery and patient outcomes by extending the timeline for certain programs and continuing others beyond the end of the COVID-19 public health emergency.** In particular, we support CMS' proposal to delay the payment penalty phase of the Appropriate Use Criteria (AUC) program and the compliance date for e-prescribing of controlled substances. We also appreciate CMS' proposals to extend temporary coverage of certain telehealth services and increase access to audio-only services for those who need them. Finally, the AHA also supports CMS' proposal to delay until 2023 the implementation of the Merit-based Incentive Program's Value Pathways (MVP) approach.

However, we continue to have concerns about the feasibility of the Merit-Based Incentive Payment System (MIPS) Value Pathways, and believe much work remains to be done to ensure they result in fair, equitable performance comparisons across MIPS clinicians and groups. **In addition, we urge CMS to reevaluate its proposals to require routine, in-person visits for the coverage and payment of telehealth**





The Honorable Chiquita Brooks-LaSure  
September 13, 2021  
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**mental health services. If these policies are finalized as proposed, access to these services would be greatly reduced for certain patients.**

We appreciate your consideration of these issues. Our detailed comments are attached. Please contact me if you have questions or feel free to have a member of your team contact Shira Hollander, AHA's senior associate director of policy, at [shollander@aha.org](mailto:shollander@aha.org), regarding the payment provisions, or Akin Demehin, AHA's director of policy, at [ademehin@aha.org](mailto:ademehin@aha.org), pertaining to the quality provisions.

Sincerely,

/s/

Stacey Hughes  
Executive Vice President

*Enclosure*

The Honorable Chiquita Brooks-LaSure  
 September 13, 2021  
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## American Hospital Association Detailed Comments

### Proposed Payment Changes

Conversion Factor. The proposed payment update for CY 2022 reflects several different factors, some of which account for policy changes implemented last year. Specifically, the Consolidated Appropriations Act of 2021 (CAA) provided a 3.75% increase in the PFS conversion factor only for CY 2021. Because the CAA instructed CMS to ignore the 3.75% increase when determining PFS payment rates for subsequent years, the agency calculated the CY 2022 conversion factor as though the 3.75% increase never occurred. Thus, CMS proposes a slight 0.14% decrease in PFS payment rates in CY 2022. However, when factoring in the expiration of the 3.75% increase, the actual change that providers will feel is a decrease of \$1.31, or 3.89%. This decrease comes just one year after CMS finalized a 10.2% cut to the conversion factor. Additionally, on Jan. 1, 2022, physician payments are set to see additional cuts from the expiration of the moratorium on the Medicare 2% sequester reduction. And in the event Congress doesn't take action to waive it, two weeks after Congress adjourns, there would be imposition of an additional 4% sequester reduction due to statutory PAYGO. These cuts occur in an environment in which Medicare payments already have not kept up with inflation. Specifically, the proposed CY 2022 conversion factor of \$33.58 is less than the 1994 conversion factor, which would be equivalent to \$61.45 in today's dollars (\$32.9050 in 1994 dollars).<sup>1</sup> Finally, because many other payers tie their fee schedules to the Medicare physician fee schedule, providers' losses under Medicare's proposed policies would be compounded by losses from other payers. **We are concerned that the conversion factor cut will have an extremely negative affect on patients' access to certain services.**

**Our concern is heightened by the fact that this cut is coming amidst nearly two years of unrelenting financial pressure on the health care system due to the ongoing COVID-19 PHE.** Even taking into account federal Coronavirus Aid, Relief, and Economic Security (CARES) Act funding, hospitals will lose billions of dollars this year due to the pandemic, in addition to the approximately \$323 billion they were projected to have lost last year.<sup>2</sup> Many of the specialties that would face drastic cuts due to the conversion factor cut and clinical labor pricing proposal (described below) are those practicing in the facility setting, exacerbating the already significant financial challenges our nation's providers are facing.

One example of the impact of the proposed conversion factor reduction and other proposed cuts in this rule can be seen in the potential payment reduction for

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<sup>1</sup> Using the [U.S. Bureau of Labor Statistics inflation calculator](#), the conversion factor in 1994, \$32.9050, is worth approximately \$61.45 today.

<sup>2</sup> AHA Report: Hospitals and Health Systems Continue to Face Unprecedented Financial Challenges due to COVID-19, June 2020.



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electrophysiologists (EPs), who treat abnormal heart rhythms, or arrhythmias. Among other services, EPs perform invasive ablation procedures to eliminate atrial fibrillation. If the proposals in this rule are finalized, EPs face a 5% cut from the proposed conversion factor and other CY 2022 changes, on top of the significant cuts finalized in last year's PFS rule, and due to many of their services being bundled for the first time in CY 2022, for a net cut of 25%. This is especially concerning given that recent data has demonstrated that ablation procedures are particularly effective treatment for patients with atrial fibrillation. Cuts of this magnitude will greatly undervalue these services and threaten patient access to them.

After almost two years of fighting to care for patients at all costs, these cuts threaten the ability of hospitals and health systems, as well as their clinicians, to continue to offer all of their essential services to the patients who need them. **Therefore, we strongly urge CMS work with Congress to maintain the 3.75% increase to the conversion factor for CY 2022 and 2023 or, alternatively, secure a waiver of budget neutrality for the PFS for CY 2022.** Doing so would allow CMS to protect patient access to care and help ensure Medicare maintains a robust network of providers of all specialties at a time when such access has never been more important. CMS also should work with Congress to develop a long-term plan for ensuring the conversion factor and associated payments are adequate to sustain all types of physicians and physician practices. Years of enormous cuts to the conversion factor is simply not sustainable for providers.

Clinical Labor Pricing. Another proposed payment change in this rule relates to clinical labor pricing. Specifically, CMS proposes to update clinical labor pricing for 2022 using data from the Bureau of Labor Statistics and other supplementary sources. CMS has not updated the clinical labor rates since 2002. Given this long delay, there is a disparity between CMS' clinical wage data and the market average for clinical labor. The agency explains that if it does not regularly update the data, clinical labor could become artificially undervalued over time.

Because the practice expense (PE) component of Relative Value Units (RVUs) used for calculating physician payment rates must maintain budget neutrality, an increase in clinical labor pricing carries a corresponding relative decrease for other PE components, such as supplies and equipment. However, while changes to the PE component of RVUs may be budget neutral for Medicare as a whole, they would not be budget neutral for individual providers depending on the degree to which they rely on clinical labor. For example, certain specialties that rely primarily on supply or equipment items, including vascular surgery, radiation oncology and oral/maxillofacial surgery will face significant cuts to their payments from the clinical labor pricing proposals. Moreover, CMS greatly underestimates the impact of these pricing cuts, as the agency does not factor in the impact of other proposed changes, including the nearly 4% reduction to the conversion factor mentioned above. For example, radiation oncologists stand to face an 8.75% cut in payments from the clinical labor pricing proposals and the proposed conversion factor reduction. This is a substantial cut, even before it is compounded by

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the proposed discount factors in the Radiation Oncology (RO) model, in which many of these providers would be required to participate. This compounding effect with the RO model is described in our forthcoming comments to the CY 2022 Outpatient Prospective Payment System (OPPS) proposed rule. **These concerns underscore the importance of our request above for CMS to work with Congress to maintain the 3.75% increase to the conversion factor and/or work with Congress to secure a waiver of budget neutrality.**

**Additionally, while we recognize the need to update data, we urge CMS to reduce the degree to which its proposals redistribute funds among providers. To that end, we strongly support the agency's proposed use of a four-year transition to implement the clinical labor pricing update.** The AHA routinely supports phase-in policies in order to moderate substantial fluctuations in payment rates, thereby promoting predictability and reliability. Such an approach would also be consistent with previous actions taken by the agency when incorporating significant new data into the PFS. For example, CMS implemented a four-year transition period in the CY 2007 PFS final rule when changing to the "bottom-up" PE methodology, as well as a similar, four-year transition period in the CY 2019 PFS final rule when incorporating new supply and equipment values based on the StrategyGen survey.

Valuation of Specific Codes: (37) Remote Therapeutic Monitoring (RTM). The AHA strongly supports CMS' proposal to activate five new CPT codes for RTM (989X1, 989X2, 989X3, 989X4 and 989X5) and to require that devices used for these services must meet the Food & Drug Administration (FDA) definition of a medical device. While these RTM codes are specific to respiratory and musculoskeletal therapy, RTM more broadly has great potential to benefit patients in a range of ways with a variety of conditions.

We also appreciate that CMS solicits feedback on how to remedy certain issues identified with the code construction. Specifically, the RTM codes are "incident to" services and, therefore, cannot be billed independently by physical therapists and other practitioners who are not physicians or non-physician practitioners (NPPs). In addition, as "incident to" services, direct, as opposed to general, supervision requirements would apply. The AHA believes there are multiple steps CMS can take in order to resolve the technical issues identified and better support the intent of these codes, including:

- Designating CPT codes 989X4 and 989X5 for "treatment management services" as E/M codes, similar to Remote Physiologic Monitoring (RPM) Treatment Management Services. As E/M codes, 989X4 and 989X5 could be billable to physicians and other qualified healthcare professionals, including physician assistants, nurse practitioners, certified nurse specialists, and certified nurse midwives. This designation is necessary to ensure that a broader range of practitioners are able to participate in the provision of RTM services "incident to" and under general vs. direct supervision.



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- Creating temporary HCPCS G-Codes that mirror 989X4 and 989X5 for treatment management services. This approach would be consistent with CMS' creation of the G2061, G2062, and G2063 codes for e-visits, allowing non-physician providers who cannot bill E/M to bill these codes directly.

We further encourage CMS to confirm that the new RTM codes are subject to the same clarifications governing RPM codes, including those related to consent, asynchronous/real-time audio conversation as part of "interactive communications" and the ability for RTM to be used for both acute and chronic diseases.

More broadly, we urge CMS to recognize in the final rule that Software as a Medical Device (SaMD) used for medical services such as RTM is not equivalent to general computer software and should not be categorized as an Indirect PE. SaMD meets the FDA definition of a device regardless of whether the software is incorporated into a medical device or runs on a general purpose platform. Therefore, it should be treated as a Direct PE.

## Appropriate Use Criteria (AUC) Program

Established under the Protecting Access to Medicare Act (PAMA) of 2014, the AUC program seeks to prevent inappropriate or unnecessary ordering of advanced diagnostic imaging services. The statute requires an ordering professional to consult with a qualified clinical decision support mechanism (CDSM) to determine if the ordered service adheres to applicable AUC. Payment for the ordered service may only be made to the furnishing professional and facility if the claim includes the required AUC data elements, which are the ordering provider's National Provider Identifier (NPI), the CDSM queried, and the response on the adherence of the ordered service to the applicable AUC. This policy applies when applicable imaging services paid under the physician payment schedule, hospital outpatient prospective payment system, or ambulatory surgical center payment system are provided in specific settings. These settings include: a physician's office, a hospital outpatient department, an ambulatory surgical center or an independent diagnostic testing facility.

The proposed rule reveals that, based on CMS' review of the ongoing "educational and operations testing" period, only 9-10% of all claims would be compliant, due to numerous and varied issues that providers encountered in submitting the requested information, meaning that 90-91% of CY 2020 AUC claims would not have been paid if the program had been in a payment penalty phase.

Delay Payment Penalty Phase. In light of the complexities of operationalizing the AUC program, as well as the ongoing COVID-19 public health emergency (PHE), CMS proposes to delay the payment penalty phase of the program to the later date of Jan. 1, 2023, or the Jan. 1 that follows the end of the PHE. **We appreciate and support a delay in the penalty phase.** Responding to the challenges of the PHE drastically

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limited the ability of providers to make the technology and workflow adjustments necessary to implement the AUC program. For example, information technology resources were re-deployed to meet the need for expanded telehealth services. Additionally, revenue cycle staff was instead needed to support newly designed billing requirements to ensure COVID-19 patient care was efficiently delivered. These essential steps to respond to the PHE were often prioritized over other technology and billing projects, including preparations for implementing an AUC program.

Additionally, we support the rule's specification that if providers still are not able to comply upon the new start date for the payment penalty phase due to issues brought about by the pandemic, they may utilize the "extreme and uncontrollable circumstances" hardship exemption. Indeed, during the ongoing and potential future surges of COVID hospitalizations, hospital resources must continue to be allocated toward helping our nation get through this pandemic. As a result, many hospitals will not be able to adjust workflows and resources until after the PHE ends, at which time there may be a backlog of important work that was not completed during the pandemic. In such instances, CMS should recognize that technological investment, workflow adjustment and education necessary to comply with the AUC program may take significant time. **As a result, we encourage CMS to allow providers to utilize the "extreme and uncontrollable circumstances" exemption for at least one year following the start of the payment penalty phase.**

Modified Orders. When providing advanced imaging services, hospital imaging centers and other furnishing providers may need to modify or add additional imaging services while a patient is under their care. The rule proposes that when performing these modified orders, when permissible under the Medicare Benefits Policy Manual, furnishing providers need not consult CDSMs. **The AHA supports this provision, which would help ensure that Medicare beneficiaries can obtain timely and important imaging services.** However, we seek clarifications as to its applicability and documentation. Specifically, although recognizing that furnishing providers may need to modify an order, the proposal seemingly would apply only to additional tests provided after the ordered service is complete. We encourage CMS to enable a furnishing provider to modify an ordered service as deemed medically necessary. Additionally, we encourage CMS to provide guidance as to how furnishing providers should report these services on a claim in order to ensure that they are not denied for failure to consult a CDSM.

Modifiers. The rule proposes two sets of HCPCS modifiers to be utilized on furnishing provider claims, one to report CDSM information and the other to report instances in which a CDSM was not consulted. Additionally, CMS proposes discontinuing usage of modifiers created for the educational period, including the "MH" modifier for reporting that an ordering physician failed to provide CDSM information. **The AHA believes the new modifiers provide the appropriate framework for furnishing providers to utilize in claims submission processes. However, we urge CMS to reconsider the**

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**discontinuation of the MH modifier.** The AUC program promotes medically appropriate ordering habits for physicians utilizing advanced imaging for their patients. If an ordering physician fails to consult a CDSM or exercise a permissible hardship, furnishing providers should be permitted to utilize the MH modifier to report this issue, which would enable CMS to address the situation directly with the orderer. Discontinuation of this code would require furnishing providers to serve as the regulatory enforcement body, as they would presumably be expected to refrain from performing imaging services for non-compliant physicians. Requiring furnishing providers not to provide imaging services for non-compliant clinicians could create a dangerous situation in which patients are unable to obtain medically necessary care. We believe the MH modifier appropriately enables a furnishing provider to identify ordering clinicians with non-compliant orders that can be addressed by CMS as they see fit.

Critical Access Hospitals (CAHs). The proposed rule considers the difficulties that CAHs may have in adhering to the AUC requirements, specifically detailing that furnishing physicians within CAHs need not report order information on their claims. **The AHA supports these efforts to reduce the resource burden on CAHs, and we urge CMS to extend this exemption to CAH physicians ordering imaging services.** CMS created the CAH designation to reduce the financial vulnerability of rural hospitals and improve access to essential services in rural communities. As the designation indicates, these rural hospitals provide care to their communities, while dealing with limited resources. Under the proposed AUC protocol, CAH clinicians who order diagnostic imaging services from applicable facilities (e.g. external labs) would be required to consult with a CDSM. In order to achieve compliance, CAHs would need to license and maintain a CDSM and spend valuable resources updating workflows and educating personnel. Just as requiring furnishing providers to achieve compliance would result in undesired resource usage, requiring ordering clinicians to achieve compliance would do the same and would otherwise would be impractical.

Reconsideration of Program Design. Each of the preceding recommendations are important steps to make the current AUC process more manageable and practical for hospitals and other providers. However, the fact remains that even if they are implemented, the process will still be burdensome and require significant manual reworking of ordering and claims submission processes. For example, there is not currently a simple method for transferring the NPI and CDSM information from a furnishing provider's incoming order system into their claims submission process. In order to include the necessary information, providers will need to manually transfer data from the order onto the claim. This not only creates administrative burden for practices, but also increases the potential for claims errors.

In the proposed rule, CMS requests comments as to whether improperly completed furnishing provider claims should be sent back for correction or formally denied and subject to standard appeals processes. **While we appreciate the desire to solicit**



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**provider preference on this issue, we believe CMS should instead work to ensure that the program as a whole does not result in a substantial number of claims submission issues for furnishing provider claims.** The AUC program was designed to achieve more appropriate ordering of advanced diagnostic imaging services by *ordering* physicians. However, the program places a significant amount of burden on *furnishing* providers, who must navigate a complex and manual workflow to report AUC information in order to successfully receive payment for their treatment. **Thus, in order to simplify this process and reduce administrative burden and claims documentation issues, we encourage CMS to reconsider the program design and collect requisite information directly from ordering provider CDSMs.** This would enable regulators to analyze and correct problematic ordering patterns with significantly less systematic disruption.

## **Telehealth and Other Communications Technology-based Services (CTBS)**

CMS proposes several changes to extend temporary coverage of some telehealth services and make permanent coverage and payment for other services. These changes build on the numerous, critical telehealth flexibilities that CMS provided during the PHE, and the flexibilities that the agency finalized in last year's PFS rule, which have enabled our members to better serve their communities. **The AHA and our members continue to applaud the Administration's support of telehealth and ongoing study into creating a long-term structure for the efficient delivery of telehealth services.**

As has been widely reported, the COVID-19 PHE fundamentally changed the way patients consume health care. The significant uptake of telehealth and other virtual care services has increased patients' access to physicians, therapists and other practitioners, helping ensure they receive the right care, at the right place, at the right time. It also greatly reduced patient travel time and missed appointments. In fact, one AHA member in California estimates that across the state, its 1.1 million video visits in 2020 translated into approximately 11.5 million miles saved for patients who would otherwise have had to commute to a site of care. According to the Centers for Disease Control and Prevention (CDC) Center for Preparedness and Response, telehealth prevents disease exposures, preserves personal protective equipment, reduces surge demand, improves surveillance, and promotes health equity.<sup>3</sup> And, according to many of our members, patients are extremely satisfied with the telehealth services they have received.

**The PHE has made clear that telehealth is a key feature in providers' toolboxes and, thus, has a permanent place in the future of care delivery. Therefore, we urge**

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<sup>3</sup> The Role of Telehealth in Expanding Access to Healthcare During the COVID 19 Pandemic: Considerations for Vaccine Uptake and Monitoring for Adverse Events Clinician Outreach and Communication Activity (COCA) Webinar

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**CMS to work with Congress to eliminate the geographic and originating site restrictions in Section 1834(m) of the Social Security Act. This would allow patients nationwide to receive all telehealth services in their homes, residential facilities and other locations.** Without this change, much of the progress that has been made since the pandemic first hit will disappear, since the status quo limits telehealth to rural areas of the country and requires patients to be at certain facilities to receive care. The PHE clearly demonstrated the need to access telehealth in non-rural areas and in the safety of patients' homes, and we urge CMS to work with Congress to ensure federal policy reflects the realities of today's health care environment.

We wish to underscore that any expansion of telehealth should be implemented with the explicit goal of addressing health equity and reducing health disparities. We are mindful that even though our recommended actions would protect access to care for millions of patients, challenges remain for the nation's historically marginalized communities. As such, telehealth must be employed with supporting policies to reach communities dealing with sustained hardship, such as funding for broadband and end-user devices.

As providers continue to explore the possibilities for improved patient care through telehealth and other virtual services, we urge CMS to do the same. This effort will best support providers' ability to deliver high quality care and achieve improved patient outcomes. **This work must include a thorough and complete accounting of the costs that go into providing virtual visits and how such expenses relate to the need to maintain capacity for in-person services.** Armed with this information, CMS should ensure providers receive adequate reimbursement for the substantial upfront and ongoing costs of establishing and maintaining their virtual infrastructure, including secure platforms, licenses, IT support, scheduling, patient education and clinician training. Without adequate reimbursement of these costs, providers will be forced to decrease their telehealth offerings, thus shrinking a potential opportunity for providers to address certain inequities in care. Adequate reimbursement for virtual services is also key to ensuring providers have the means to invest in HIPAA-compliant technologies and to deliver these services with the highest attainable quality of care.

**As part of this effort, CMS also should consider which elements of the business of providing care will need to be adjusted to account for when services are delivered via virtual connection.** For example, providers should be able to capture during telehealth visits those diagnoses that impact risk adjustment so as to avoid having to conduct the same patient visit twice — once via telehealth and once in person to record all of the patient's conditions. Similarly, CMS should create a mechanism by which providers can collect and document vital signs obtained as part of the Annual Wellness Visits (AWVs) "Measure" component. We commend CMS for permitting beneficiaries for the duration of the COVID-19 pandemic to self-report vital signs when clinically acceptable. We urge the agency to continue this policy after the PHE ends and to disseminate guidance on what providers can do in situations in which patients cannot

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self-report. We also recommend CMS consider how to account for missing diagnosis data that will certainly occur as a result of the dramatic decline in utilization this year.

**We again thank the agency for its unprecedented efforts to expand telehealth access.** Below are our comments on specific proposals in the rule.

Category 3 Services. In the CY 2021 PFS final rule, CMS created a new Category 3 for adding services to the Medicare telehealth list on a temporary basis. This “Category 3” describes services added during the PHE for which there is clinical benefit when furnished via telehealth, but for which there is not yet sufficient evidence to consider the services as permanent additions under Category 1 or Category 2 criteria. In this rule, CMS proposes to retain all services added to the Medicare telehealth services list on a Category 3 basis until the end of CY 2023. **The AHA strongly supports CMS’ proposal to retain Category 3 services on the Medicare telehealth list for an additional two years.** Doing so will contribute greatly to the tools providers can use to care for patients and will mitigate the uncertainty of when the PHE will end, as well as the impact that will have on Category 3 services. **However, we urge CMS to clarify the requirements for the provision of Category 3 services after the end of the PHE.** Absent an act of Congress, we urge the agency to allow providers to continue to be able to furnish Category 3 services to patients in their homes. Otherwise, we will find ourselves in a counter-productive “one step forward, two steps back” arrangement, in which patients would have access to newly covered telehealth services, but only if they return to office- or facility-based visits.

**We further urge CMS to consider making Category 3 a permanent part of the Medicare telehealth list.** Establishing Category 3 as a subregulatory way to temporarily add services to the Medicare telehealth list would provide much-needed regulatory flexibility for the adoption of essential and innovative technologies in response to the emergence of new challenges.

Telehealth Services for Diagnosis, Evaluation, or Treatment of Mental Health Disorder. Section 1834(m) of the Social Security Act limits the provision of Medicare telehealth services to certain geographic areas largely representing rural parts of the country and to the listed originating sites in which a patient must be located to receive telehealth. The CAA waived these geographic restrictions and added the patient’s home as a permissible originating site for telehealth services furnished for the purpose of diagnosis, evaluation or treatment of a mental health disorder, effective for services furnished on or after the end of the COVID-19 PHE. The CAA also required that the provider furnishing a telehealth service must furnish an in-person service within six months prior to the telehealth service and thereafter, at such times the Secretary of Health and Human Services determines appropriate. To implement this provision, CMS proposes to require providers to conduct an in-person, non-telehealth service within six months prior to providing an initial mental health telehealth service, and at least once every six months thereafter.



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**The AHA opposes CMS' proposal to require subsequent in-person visits every six months for the continued coverage of and reimbursement for telehealth mental health services. Additionally, as the industry continues to monitor the use of telehealth for mental health and other services, we urge CMS to work with stakeholders and Congress to revisit the required initial in-person visit within six months before telehealth services begin, and perhaps consider limiting it to services that may particularly benefit from in-person contact, such as psychiatric medication management.** As the agency is well aware, the nation is currently suffering from extreme access challenges in the behavioral health field. More than one-third of Americans live in an area without sufficient behavioral health providers. Specifically, 56% of counties in the U.S. are without a psychiatrist, 64% of counties have a shortage of mental health providers and 70% of counties lack a child psychiatrist.<sup>4</sup> CMS should be implementing policies that reduce this access crisis, not policies — such as in-person requirements — that exacerbate it. Under such a policy, scores of beneficiaries who could benefit from telehealth mental health services would not have access to them because they are too far away from or are unable to travel to a mental health provider. For a specialty that has been so successful via telehealth and for which no physical examination is required, the requirements simply would create a barrier to access, an insurmountable burden on patients and providers, and a deterrence from seeking mental health services.

Notably, CMS does not propose a corresponding in-person requirement for virtual mental health services provided by rural health clinics (RHCs) and federally qualified health centers (FQHCs). Rather than proposing an in-person visit requirement for RHCs and FQHCs that corresponds to the proposed in-person requirements for acute care hospitals, CMS seeks comment on whether it should require in-person visits or whether such a requirement could be especially burdensome for beneficiaries that receive treatment at RHCs and FQHCs. This request — rather than a proposal — demonstrates clearly that CMS does not view in-person visits to be clinically necessary for the provision of safe, effective virtual mental health services. If CMS did hold this belief, it would have no choice but to propose these in-person requirements for all beneficiaries receiving mental health telehealth services. That the agency declines to do so indicates it does not find in-person visits absolutely necessary. And, as described above, the access burden the agency fears in-person requirements could exacerbate for patients of RHCs and FQHCs is actually widespread across patients and providers nationwide.

**While we continue to oppose in-person requirements for mental health telehealth services, if CMS chooses to move forward with this policy, we urge the agency to do so in the least burdensome way possible.** Specifically, allowing any physician or

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<sup>4</sup> Coe, Erica. A Holistic Approach For The U.S. Behavioral Health Crisis During the COVID-19 Pandemic, McKinsey & Company, August 2020. <https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/a-holistic-approach-to-addressing-the-us-behavioral-health-crisis-in-the-face-of-the-global-covid-19-pandemic>.

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practitioner of the same specialty and same subspecialty within the same group as the physician or practitioner who furnishes the telehealth service to furnish the in-person service would help ameliorate the administrative burden of the requirement.

Rural Health Clinics (RHCs) and Federally Qualified Health Centers (FQHCs). CMS proposes to use its authority to extend the CAA provisions relating to mental health telehealth services to RHCs and FQHCs. Specifically, CMS proposes to allow RHCs and FQHCs to conduct mental health visits through interactive, real-time telecommunications technology for the purposes of diagnosing, evaluating, or treating a mental health disorder. CMS also proposes to allow RHCs and FQHCs to furnish mental health visits using audio-only communication in cases where beneficiaries are not capable of, or do not consent to, the use of devices that permit a two-way, audio/video interaction. These changes would allow RHCs and FQHCs to report and be paid for mental health visits furnished via real-time, telecommunication technology in the same way they currently do when these services are furnished in-person.

**We strongly support these proposals.** However, in response to CMS' request for comment on whether it should impose a requirement similar to that specified by the CAA that there be an in-person service within six months prior to the furnishing of the telehealth service and every six months thereafter, for the reasons described above, we do not believe the agency should establish in-person requirements. **We further urge CMS to extend these proposals to CAHs to enable these providers, which are essential to rural health care, to also conduct mental health visits through interactive telecommunications technology and bill and be paid for these services as if they are provided in-person.**

Payment for Medicare Telehealth Services Furnished Using Audio-only Communication Technology. Section 1834(m) specifies that for Medicare payment, telehealth services must be furnished via a "telecommunications system." In 42 CFR § 410.78(a)(3), CMS defines "telecommunications system" to mean an "interactive telecommunications system," which the agency further defines as "multimedia communications equipment that includes, at a minimum, audio and video equipment permitting two-way, real-time interactive communication between the patient and distant site physician or practitioner." During the PHE, CMS waived the requirement that telehealth services be delivered with video technology to allow the provision of certain behavioral health, counseling, and evaluation and management (E/M) services via audio-only communication.

In this rule, CMS proposes to amend its regulations to define "interactive telecommunications system" to include audio-only communications technology when used for telehealth services for the diagnosis, evaluation or treatment of mental health disorders furnished to established patients when the originating site is the patient's home. CMS proposes to limit payment for audio-only mental health services to physicians or practitioners who have the capacity to furnish two-way, audio/video

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telehealth services but are providing the mental health services via audio-only communication technology in an instance where the beneficiary is unable to use, does not wish to use, or does not have access to two-way, audio/video technology. The agency also proposes to allow RHCs and FQHCs to deliver virtual mental health services via audio-only connection, subject to the same restrictions described here.

**The AHA continues to enthusiastically support CMS' ongoing efforts to reimburse audio-only services.** This flexibility has enabled our members to maintain access to care for numerous patients who do not have access to broadband or video conferencing technology, or when a video connection fails. In those situations, if a provider and patient are connected via audio/video technology and their video connection fails, they can default to an audio-only visit and pick up where they left off. Additionally, audio-only behavioral health services have become extremely popular with patients who are more comfortable without hour-long, face-to-face visits.

**Therefore, we strongly support the agency's proposals in this rule to permanently enable providers to deliver certain mental health services via audio-only connection.** We believe this is particularly important to ensure equitable access to mental health services for individuals in low broadband areas and for those whose jobs (e.g., low wage, hourly) prevent them from having a private space to conduct a video visit. Audio-only care ensures that these and other individuals remain connected to their providers and are able to maintain their health despite the daily challenges they face. To that end, we urge CMS to consider other services that can safely and appropriately be delivered via audio-only connection, especially for patients who do not have access to audio-visual technology.

Rural Emergency Hospitals (REHs). As required by law, CMS proposes to amend its regulations to add REHs, a new provider type created by the CAA, to the list of approved telehealth originating sites. **We support this proposal. Rural health care can benefit profoundly from robust telehealth services due to the longstanding challenges rural communities face in provider recruitment/retention, low patient volume and geographic isolation.** As detailed above, to maximize the potential for positive patient outcomes, we urge CMS to work with Congress to remove certain 1834(m) restrictions to allow REHs to also serve as distant sites for telehealth delivery to patients in their homes and other residential locations. These changes would allow patients to remain connected to their REH providers if they are unable to leave their homes or if it is unsafe to do so.

Direct Supervision by Interactive Telecommunications Technology. During the PHE, CMS allowed providers to satisfy "direct supervision" requirements for diagnostic tests, physicians' services and some hospital outpatient services through virtual presence, using real-time audio/video communications technology. In the CY 2021 PFS final rule, CMS finalized the continuation of this policy through the later of the end of the calendar year in which the PHE ends or Dec. 31, 2021. In this rule, and in the CY 2022 OPSS



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proposed rule, CMS seeks comment on whether it should make this flexibility permanent or if it should temporarily continue it beyond the current timeframe. **The AHA strongly supports the COVID-19 pandemic policy regarding direct supervision by interactive telecommunications technology. We urge the agency to make this policy permanent and stand ready to assist in determining appropriate guardrails for its operationalization.**

Proposal to Establish Values for Remote Retinal Imaging and Comment Solicitations.

The AHA appreciates that CMS is considering how to better account for innovative technology, such as software algorithms and Artificial Intelligence (AI) within its existing PE methodology. Specific to diabetic retinopathy, we support CMS' proposal to crosswalk CPT code 92229 to CPT code 92325 as an interim means of accounting for total resource costs. We encourage CMS to continue to evolve its approach to reimbursement of this code in order to ensure it ultimately reflects an appropriate value.

The AHA also appreciates that CMS is gathering stakeholder input to assist with developing a better understanding of the resource costs for services involving software algorithms and AI. The request for information (RFI) addresses a number of complex issues, including changes in cost structures in the physician office setting, the impact on beneficiary access to Medicare-covered services, risks of overutilization, fraud, waste or abuse, and associations with improvements in quality or health equity. Given the critical importance of the future of innovative technologies in health care, the AHA encourages CMS to issue a separate, stand-alone RFI that looks holistically at this issue rather than in the context of a specific payment rule or structure. This will help to ensure a broader range of stakeholder views are represented.

## **Payment for Evaluation & Management Visits**

Over the course of several years of PFS rules, CMS has engaged in an ongoing review of payment for office/outpatient E/M visit code sets. In this rule, CMS makes various proposals to refine some aspects of other E/M visit code sets, including: 1) "split" or shared E/M visits; 2) critical care services; and 3) teaching physician services.

Split (or Shared) E/M Visits. A "split" or "shared" E/M visit is one that is performed by both a physician and a non-physician practitioner (NPP) in the same group. Physicians in a facility setting may bill for an E/M visit when both the billing physician and an NPP in the same group each perform a portion of the visit, but only if the physician performs a substantive portion. If the physician does not perform a substantive part of the split visit and the NPP bills for it, Medicare will pay only 85% of the fee schedule rate. Due to changes to Medicare Claims Policy Manual sections that covered split visits, along with recent revisions to E/M visit coding and payment, CMS addresses specifications around billing split visits through rulemaking this year. Specifically, among other proposals, CMS proposes to define the "substantive portion" of the split (or shared) visit as more than half of the total time spent by the physician and non-physician practitioner

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performing the visit. **The AHA urges CMS not to finalize this policy.** Doing so would result in a significant reduction in physician revenue on top of the other cuts proposed in this rule.

For any patient visit, there are several tasks that are essential components of clinical care, but which do not require physician time, such as securing pre-authorization, explaining test results to patients and families, completing preliminary documentation, and arranging for durable medical equipment, for example. On the flip side, while physician medical decision-making often drives the patient assessment and care plan, high-complexity medical decision making (MDM) doesn't necessarily take more time than moderate or low MDM. Thus, given the general health system move toward team-based care and support for top-of-license care, both of which the AHA strongly supports, the tasks for which a physician is not necessary will almost always make up the bulk of the *time* of a patient visit. This does not mean these tasks make up most of the complex analysis key to the visit. In fact, these policies could create an incentive for physicians to spend time performing tasks that NPPs at the top of their licenses are qualified to perform. This result would undermine the use of NPPs to provide complete patient care and to keep costs down. The physician payment rate is meant to compensate for the years of training, experience, and expertise of the physician and should not be available only in the rare situation when the physician spends *more* time with the patient (greater than 50%) than the NPP.

The AHA recognizes that CMS needs some way to measure a physician's contribution to the visit and that time is an expedient way to do so. We also recognize that if a physician does not substantively contribute to a visit, however that is defined, the payment rate should reflect that. **Therefore, to capture physicians' contribution to medical decision making, we recommend CMS set the threshold for the "substantive portion" of the visit at 25%.** This would ensure appropriate compensation for physicians when they make a substantive contribution to team-based care for a patient and entitle them to bill for their role as the party ultimately responsible for a patient's care. Conversely, when physicians decide that a case is straightforward and does not necessitate their involvement to a substantive degree, they can leave the care and billing to the NPP and turn their attention to other cases.

Critical Care Services. CMS makes several proposals in this rule related to critical care visits, including a proposal to bundle critical care visits with procedure codes that have a global surgical period. Under this proposal, practitioners would be prohibited from reporting critical care visits during the same time-period as a procedure with a global surgical period. **The AHA urges CMS to reconsider this policy.** It is a near universal practice for physicians to be paid at least partly based on their productivity. The physicians that perform critical care services are different from the physicians that perform the surgery in a global surgical period. Thus, bundling critical care visits, as proposed, would result in a significant revenue reduction for critical care physicians. This is because without the ability to get paid separately for their services, it may

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artificially appear for some critical care physicians that they have zero visit volume and no productivity. This will essentially slash the portion of their compensation that is based on productivity to zero. As discussed throughout this letter, these types of proposals would institute cuts that only build upon the already-large proposed cuts to the conversation factor change and the clinical labor pricing changes. Yet, critical care physicians have been on the front lines fighting COVID-19 for nearly two years — now is not the time to cut their payments.

## Payment for Therapy Services

As it has done in prior rulemakings, CMS in this rule implements sections of the Bipartisan Budget Act (BBA) of 2018, which required outpatient physical and occupational therapy services furnished in whole or in part by a therapy assistant on or after Jan. 1, 2022 must be paid at 85% of the PFS amount. In the CY 2019 PFS rulemaking, CMS finalized a definition of “in whole or in part” as visits during which more than 10% of the therapy service is furnished by a therapy assistant. This is known as the “*de minimis* standard.” In the CY 2020 PFS final rule, CMS finalized the *de minimis* standard to apply only to the minutes that the therapy assistant spends independent of the therapist.

In March 2021, CMS posted guidance on how to assign the modifiers in different billing scenarios. In this rule, CMS notes that it received feedback indicating the guidance created confusion, especially regarding how the *de minimis* standard applies to a final unit of a multiple-unit timed service. Thus, CMS makes several proposals in this rule in an attempt to address that confusion.

However, CMS’ clarifications on the use of the *de minimis* standard remain complex and confusing. **We urge CMS to clarify in the final rule when the *de minimis* standard applies to the use of the modifiers. Alternatively, we urge CMS to simplify this policy by requiring the modifiers only when therapy assistants furnish a visit “in whole,” without services furnished by a therapist.** This approach would avoid penalizing providers for providing two sets of professionals when they are needed to ensure patient safety and effective outcomes.

## Laboratory Specimen Collection and Travel Allowance under the Clinical Laboratory Fee Schedule (CLFS)

The clinical laboratory fee schedule provides a nominal fee, generally between \$3 and \$5, for specimen collection from homebound patients and nonhospital inpatients. In March 2020, CMS established two additional specimen-collection level II HCPCS codes related to COVID-19: G2023 (specimen collection for COVID-19, any specimen source) and code G2024 (specimen collection for COVID-19 from an individual in a skilled nursing facility or by a laboratory on behalf of a home health agency, any specimen source) for independent laboratories to use for the duration of the COVID-19 PHE. CMS



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established a payment amount of between \$23 and \$25 for these specimen collection codes to reflect the increased resource costs and the need for trained personnel in collecting specimens for COVID-19 testing during the PHE. Although CMS states that it expects the increased specimen collection fees for COVID-19 laboratory tests will end at the termination of the PHE, it is seeking comment on these policies for consideration in future rulemaking. In particular, the agency is requesting comment regarding what additional resources might be needed for specimen collection for COVID-19 laboratory tests and other tests after the PHE ends.

**The AHA recommends that CMS continue to maintain, beyond the end of the PHE, the current increase in the fees provided to hospital and independent laboratories that collect specimens for COVID-19 laboratory testing from homebound patients and nonhospital inpatients.** The novel coronavirus is expected to become endemic and remain even after the PHE ends. While outbreaks will likely be rarer and smaller, they will still occur, particularly as immunity wanes among the vaccinated and recovered individuals and as immunologically naive babies are born. Additionally, new variants may evolve that can escape our current immune defenses. This means that it will still be necessary to continue to use higher level, and more costly, personal protective equipment (PPE) and continue other training and protocols necessary for the protection of those health care personnel who obtain these laboratory specimens.

In fact, the use of these enhanced protective measures is recommended by CDC and mandated by the Occupational Safety and Health Administration (OSHA). CDC's [Interim Guidelines for Collecting and Handling of Clinical Specimens for COVID-19 Testing](#) state, "For healthcare providers collecting specimens or working within 6 feet of patients suspected to be infected with SARS-CoV-2, maintain proper infection control and use recommended PPE, which includes an N95 or higher-level respirator (or facemask if a respirator is not available), eye protection, gloves, and a gown." Furthermore, for initial diagnostic testing for current SARS-CoV-2 infections, CDC recommends collecting and testing an upper respiratory specimen using sterile swabs by a trained health care provider only. This is important both to ensure patient safety and preserve specimen integrity.

Moreover, OSHA's recently issued [COVID-19 Health Care Emergency Temporary Standard \(ETS\)](#), which is expected to become a permanent standard by the end of 2021. The ETS requires that health care employers must provide a respirator to each employee who has exposure to a person with suspected or confirmed COVID-19 and ensure that it is provided and used in accordance with OSHA's [Respiratory Protection Standard](#). Employers must also provide each of these employees with gloves, an isolation gown or protective clothing, and eye protection, as well as ensure that the PPE is used in accordance with OSHA's [PPE requirements](#).

**In fact, the AHA recommends that CMS also increase the nominal fees for collection of non-COVID-19 specimens from homebound patients and**

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**nonhospital inpatients for purposes of other infectious disease laboratory testing.** Hospital and independent laboratories are finding that the safety practices and protocols put into place for COVID-19, such as using more and higher level PPE and increased training of personnel, improve safety for their laboratory personnel and patients, even if the specimens collected are intended to test for other infectious diseases, such as influenza. Respiratory infections are among the top 10 causes of death in the U.S., and it is clear that they can be reduced through infection control measures, such as those employed for reducing the burden of COVID-19. There is evidence that such enhanced safety measures work extraordinarily well; last year the rate of infection and death from influenza dropped precipitously, primarily due to the social distancing and masking mandates put into place for the COVID-19 pandemic. CMS should support the effort to reduce morbidity and mortality from influenza and other infectious diseases by increasing the nominal fee provided for specimen collection.

## **Medicare Part B Benefit for Opioid Treatment Programs (OTPs)**

OTPs are healthcare entities that focus on providing medication-assisted treatment (MAT) for people diagnosed with opioid use disorder (OUD). Enacted October 2018, Section 2005 of the Substance Use-disorder Prevention that Promotes Opioid Recovery and Treatment (SUPPORT) For Patients and Communities Act established a new Medicare Part B benefit category for OUD services furnished by an OTP beginning on or after Jan. 1, 2020. In this rule, CMS proposes adjustments to the payment rate of the previously finalized service of naloxone dispensing. In addition, the agency proposes to allow audio-only counseling and therapy services beyond the end of the PHE for COVID-19.

**The AHA appreciates CMS' continued commitment to addressing the opioid crisis, and values that CMS has listened to providers and stakeholders by allowing additional flexibility to offer the most effective and accessible care possible.** We encourage the agency to continue to look for ways to improve this benefit and access to care for patients not only with OUD, but other substance use disorders as well.

Payment for Take-home Supply of Naloxone. As with the previous years' drug pricing provisions, the AHA is concerned about the proposal to price the higher dose naloxone product using the average sales price without the standard 6% add-on. This add-on is used in pricing other Part B drugs to account for overhead costs or additional mark-ups accrued in traditional drug distribution channels. Although CMS *believes* that many OTPs purchase the drugs directly from manufacturers, which would limit these extra costs, the agency provides little evidence to support this assertion. **Thus, we again recommend that CMS include a factor for overhead in its drug pricing methodology.**

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**In addition, we again urge CMS to reconsider the frequency limitation of once every 30 days, except when a further take-home supply is medically reasonable and necessary.** CMS' rationale behind this limitation is unclear. Previous US Surgeon General Jerome Adams stated in his 2018 [advisory](#) that "increasing the availability and targeted distribution of naloxone is a critical component of our efforts to reduce opioid-related overdose deaths," so it is incongruous that CMS would apply limitations on the distribution of this safe, live-saving drug to those patients who meet the criteria for opioid overdose listed in the Surgeon General's advisory.

Payment for Audio-Only Counseling and Therapy Services. Near the beginning of the PHE for COVID-19, CMS temporarily allowed OTPs to provide counseling and therapy services via audio-only telephone call rather than requiring that these services be provided in-person or via two-way interactive audio/video communication technology when the latter is not available to the beneficiary. While the original waiver of existing regulations would only last until the end of the PHE, CMS proposes in this rule to extend this allowance after the PHE ends. **The AHA supports this proposal and strongly supports the allowance of audio-only telehealth services to improve access to care.** While digital modalities and virtual care have been increasingly available as a result of the PHE for COVID-19, many citizens are unable to use these tools due to lack of broadband internet, personal computing equipment, or experience and comfort using the technology. By including audio-only telephone calls as another way to get in touch with one's clinician, CMS is offering an important lifeline for those otherwise on the wrong side of the "digital divide."

In addition, CMS proposes to require OTP providers to document in the beneficiary's medical record why counseling and therapy services were delivered via audio-only telephone call instead of in-person or via two-way, audio/video technology. It is unclear what type and level of detail of documentation the agency expects. In the proposed rule, CMS defines "not available to the beneficiary" as circumstances in which the beneficiary is not capable of or has not consented to the use of devices that permit a two-way, audio/video interaction. Would providers be expected to merely note that the beneficiary is not capable of or has not consented to the use of these devices, or would they be required to include details as to *why* the beneficiary is not capable (e.g., "lacks broadband internet access," or "unable to locate smart phone")? Would CMS require a separate or different informed consent process for audio-only services that providers would have to demonstrate in the medical record? The billing codes themselves do not require any such documentation. **Therefore, we urge CMS to ensure that providers have the information they need to appropriately bill for these services, before the requirements begin.**

## **Electronic Prescribing of Controlled Substances (EPCS)**

In the CY 2021 OPPTS/ASC final rule and the FY 2021 IPPS/LTCH final rule, CMS delayed the requirement to conduct e-prescribing of Schedule II-V controlled



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substances using the NCPDP SCRIPT 2017071 standard to Jan. 1, 2022. We supported this delay due to our concerns regarding electronic health record (EHR) vendor capacity to deploy — and hospitals' and health systems' capacity to implement — such a high volume of IT system changes on a short timeline, especially in light of the redirection of resources to support technology and data needs specific to the COVID-19 PHE.

In fact, we recommended that CMS implement an even further delay. Many providers — small hospitals in particular — struggle to implement IT upgrades due to cost and logistical barriers, and even if an EHR contains the EPCS capability, organizations would need to train staff and implement workflow alterations, which is a lot to take on in one year. **Thus, we appreciate and support CMS' proposal to further delay the compliance date for EPCS until Jan. 1, 2023. We also are grateful that CMS recognizes the disparities in EPCS capabilities for long-term care providers, and support the even later compliance date of Jan. 1, 2025 for these providers.** In particular, we appreciate that CMS has looked outside of its own regulatory structure to determine how the work of other agencies and gaps in IT resources and infrastructure would affect providers' ability to comply with its rules, such as the Department of Justice's work on requirements for multifactor authentication that will make EPCS easier and the lack of LTC-specific guidance on using the NCPDP SCRIPT and broadband internet access in rural communities.

**We also understand and agree with CMS' rationale behind the other provisions regarding EPCS.** According to the agency's analysis, providers are able to conduct EPCS for at least 70% of their Part D controlled substance prescriptions, and thus will be required to meet that threshold beginning with the compliance date. If the agency had not delayed this date, we would have recommended a phased-in approach (for example, requiring just 50% of Part D controlled substance prescriptions to be done electronically for the first year before ramping up to 70%), but because of the additional year the agency proposes to grant, we find this requirement to be reasonable. We also agree with the exceptions — and lack of exceptions — proposed in the rule. We agree that EPCS provides for additional security and can improve access to necessary controlled substances, and the agency proposes providing exceptions when implementing EPCS would result in opportunities for diversion or would be unnecessarily burdensome.

**Finally, we support CMS' proposal for compliance actions.** As we noted in our reply to CMS' 2020 RFI on EPCS, enforcement actions must be remedial rather than punitive, at least in the beginning stages of compliance. While many providers have experience using the required standard, significant barriers remain to universal adoption, and there has been a low uptake of the process in physician practice. Thus CMS' proposal to send letters informing providers of noncompliance and furnishing resources on how to come into compliance is helpful and appropriate.

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## Physician Self-Referral Updates

In this proposed rule, CMS further clarifies the definition of “indirect compensation arrangements” that are subject to the prohibition on self-referrals. The December 2020 final rule, “Modernizing and Clarifying the Physician Self-Referral Regulations,” which significantly narrowed the definition, thereby narrowing the universe of arrangements subject to regulation, inadvertently also excluded certain rentals of office space or equipment arrangements between providers and physicians from regulatory oversight. The proposed change would clarify that the two-step analysis of such arrangements that were finalized in 2020 will apply to any unbroken chain of financial relationships in which the compensation paid under the arrangement closest to the physician (or immediate family member) is for anything *other than* services personally performed by the physician; this includes arrangements under which unit-based payments are made for leasing (or purchasing) office space or equipment.

To further clarify that office space and equipment arrangements are subject to heightened scrutiny, CMS poses a definition to draw lines around what “personally performed” services means. CMS proposes to define personally performed services to “not include services that are performed by any person other than the physician (or immediate family member), including, but not limited to, the referring physician’s (or immediate family member’s) employees, independent contractors, group practice members, or persons supervised by the physician (or the immediate family member).”

AHA appreciates the need to modify the definition of “indirect compensation arrangement” to address the unintended deregulation of certain equipment and space leases between physician-owned entities and DHS entities. **We are concerned, however, that the proposed modification would effectively prohibit some common and benign arrangements, while creating new ambiguities regarding what is a “personally performed” physician service. As an alternative, we urge CMS to avoid these issues by simply carving out equipment and space leases from application of the “unit test.”** The resulting regulation would not affect previously acceptable service arrangements such as mobile lithotripsy arrangements, but would restore the prior regulatory scheme for space and equipment leases.

**Regardless of whether CMS adopts our proposed solution to the space and equipment lease issue, we urge the agency to clarify its commentary in the rule regarding when a service is personally performed.** We are concerned that CMS’ proposed definition of “personally performed,” if read literally, would mean physicians could not get full work RVU credit for services that CMS has long recognized as personally performed for reimbursement purposes. The physician fee schedule has long recognized that certain procedures or services might include some aspect of the service performed by others in conjunction with the physician and that the work RVUs for the physician service include such personally performed supervision.

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For instance, CMS has long recognized that the practice expenses for evaluation and management visits include clinical labor costs for office staff who help to perform parts of those services, such as taking parts of the history or vital signs before the physician sees the patient. Further, in a hospital setting, surgeons routinely work with and oversee teams of hospital staff to perform various tasks during complex surgical procedures. This includes, for example, suturing the incision at the conclusion of the procedure. As long as a physician's role in that team setting meets criteria set in reimbursement policy, CMS pays the physician for performing the service albeit in a team setting. We see no reason to apply different rules to assess whether a service is personally performed in a compensation context than CMS applies in a reimbursement context (which is effectively what the rule would do if finalized and read literally).

It is important to ensure that hospitals have the guidance needed to inform their compliance programs and avoid the diversion of resources to defend against unwarranted False Claims Act allegations.

### **Quality Payment Program – Merit-based Incentive Payment System (MIPS)**

Mandated by the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA), the QPP began on Jan. 1, 2017, and includes two tracks — the default MIPS, and a track for clinicians with a sufficient level of participation in certain advanced alternative payment models (APMs).

Since the program's inception, the AHA has urged CMS to implement MIPS in a way that focuses on high-priority quality issues; is gradual and flexible; measures providers accurately and fairly; minimizes unnecessary data collection and reporting burden; and fosters collaboration across the silos of the health care delivery system. We appreciate that a number of CMS' MIPS policies have aligned with these principles, including CMS' gradual increases to reporting periods, data standards and performance thresholds for receiving positive or negative payment adjustments. CMS has also implemented a facility-based measurement approach and removed some outmoded quality measures.

However, the AHA remains concerned about the direction of the MIPS Value Pathways (MVPs) that CMS intends as a replacement for the current approach to the MIPS. We also have concerns about several of CMS' proposed changes to MIPS reporting requirements and scoring approaches.

MIPS Value Pathways. As we understand it, MVPs are intended to align and reduce reporting requirements across the four MIPS performance categories. Built over time, the MVPs would organize the reporting requirements for each MIPS category around specific specialties, treatments or other priorities. While CMS had intended to begin MVP implementation in the CY 2022 performance year, CMS proposes seven MVPs in this rule that would be available for voluntary participation beginning in CY 2023 —



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rheumatology, stroke care and prevention, heart disease, chronic disease management, lower extremity joint repair (e.g., knee replacement), emergency medicine, and anesthesia. MIPS participants would be required to register for MVPs if they wish to report them. However, CMS also indicates in the rule that it intends to sunset “traditional MIPS” and require all MIPS participants to participate in MVPs starting after the CY 2027 performance year.

The AHA appreciates that CMS has proposed to delay the implementation of MVPs by an additional year (i.e., until CY 2023), and that MVP participation would remain voluntary at this time. **However, the AHA believes that unless and until CMS can address several conceptual issues with MVPs described below, CMS should not set a date certain for transitioning to mandatory MVP participation.**

**First, CMS would need to ensure there are enough measures available to create MVPs applicable to the more than 1 million eligible clinicians that currently participate in the MIPS program.** Given the wide range of specialty types participating in the MIPS, this will be exceptionally difficult to achieve. Furthermore, given CMS’ correct focus on implementing “Meaningful Measures” in its programs, it would seem misguided to add measures just for the sake of having enough of them to create an MVP. However, if the agency’s concept is to assign clinicians to particular MVPs, it would need to ensure it has measures that meaningfully apply to their clinical practice. We again urge CMS to construct several more “prototype” MVPs, determine how many clinicians it could potentially assign to each and obtain clinician input on whether the measures in those MVPs would align with their clinical practice.

**CMS must also ensure that using an MVP approach would provide a fair, equitable comparison of performance across clinician and group types and specialties.** If CMS’ ultimate intention is to either assign or require clinicians to select MVPs, then their goal should be that clinicians have comparable opportunities to perform well. Stated differently, CMS would need to ensure that some MVPs are not inherently “easier” to score well on than others. This, too, is a daunting issue to address, but one that is essential for the MVPs to have credibility with participating clinicians and the public. We suggest that CMS use the “prototype” MVP analysis we suggested above to look at the performance distributions across MVP models to determine whether any specialty types or group types score any worse than others.

**Lastly, the AHA remains concerned about the feasibility and potential administrative burden of MVP approach for multi-specialty group practices.** In this rule, as we have encouraged in prior comment letters, CMS proposes a process that allows multi-specialty practices to form “subgroups” within a single tax ID number (TIN), thereby allowing various parts of the group to report different MVPs, the MIPS APM Performance Pathway and other MIPS measures. We believe subgroups would be an essential option for implementing MVPs. However, the key distinction between the current MIPS and the proposed MVP subgroup approach is that subgroups would be

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compulsory for multi-specialty practices that wish to participate in MVPs starting with the CY 2025 reporting year. As a result, multi-specialty groups may actually face an increase in their reporting burden, which would contradict CMS' stated goal of reducing provider burden. **The AHA urges CMS not to mandate subgroup formation for multi-specialty practices participating in MVPs at this time.**

MIPS APM Performance Pathway (APP). **The AHA supports CMS' proposal to allow MIPS-eligible clinicians to report the APP as a subgroup.** Beginning with the CY 2021 performance period, CMS sunset the MIPS APM scoring standard, and replaced it with the APP. The APP is similar to the former MIPS APM scoring standard, but requires clinicians and groups to report on a common set of six quality measures. Notwithstanding our conceptual concerns with mandating MVP participation (described above), the AHA has supported giving multi-specialty practices the option of forming subgroups to participate in the MIPS, and believes CMS proposal increases the flexibility available to practices.

MIPS Quality Category. For CY 2022 quality reporting, CMS would mostly carry over CY 2021 reporting requirements and scoring approaches. However, CMS proposes three notable changes — an updated measure benchmarking approach, a higher data completeness threshold and the removal of bonus points for end-to-end electronic reporting and high priority measure.

**The AHA supports CMS' proposed quality measure benchmarking policy for CY 2022.** Current MIPS policy requires CMS to, where possible, use historical data to set measure score benchmarks. For performance year 2022, the benchmark period ordinarily would be CY 2020. However, in light of the COVID-19 PHE, CMS is not sure whether it will have sufficiently representative data to establish benchmarks. We believe it would be appropriate for CMS to data from either the CY 2022 performance period itself, or other historical data from an earlier year (e.g., 2019) to establish benchmarks.

**The AHA supports the concept of increasing the MIPS data completeness threshold from 70 percent to 80 percent beginning in CY 2023. However, in light of the continued impact of the COVID-19 PHE on MIPS-eligible clinicians, we urge CMS to monitor reporting from the CY 2021 performance period before adopting this increase.** The reporting of complete data on quality measure is important to ensuring the data are an accurate representation of clinician performance. We appreciate that CMS has generally adopted gradual increases to this threshold over the duration of the MIPS program. However, as CMS itself has acknowledged, the impact of the COVID-19 PHE on physician practices, hospitals and others in the health care system has been profound. Raising the bar on data completeness may have been entirely appropriate policy in the absence of the pandemic. However, the full restoration of "normal" operations in physician practices could take time. Having data on the level of completeness of data reported in CY 2021 could give CMS insights into whether practices are truly ready for the higher data completeness threshold.

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**The AHA asks CMS to delay the removal of high-priority measures and end-to-end electronic reporting bonus points by at least one year (until the CY 2023 performance period).** Current MIPS policy awards clinicians and practices 2 bonus points for reporting measures high-priority measures beyond the one required outcome/high-priority measure that CMS requires. CMS also awards one bonus point for each measure reported using end-to-end electronic reporting. We appreciate that these bonus points stem from early versions of the MIPS program that sought to maximize rewards for those clinicians who choose to participate in the program. At the same time, CMS has also proposed to raise substantially the MIPS performance threshold that clinicians must meet to achieve neutral or positive payment adjustments. To ensure a less disruptive transition to this higher performance threshold, we believe CMS should retain the availability of these bonus points for at least one more year.

MIPS Cost Category. CMS proposes to add five episode-based cost measures to the list of measures on which eligible clinicians and groups could be scored. **The AHA continues to have substantial concerns with the measures used in the MIPS cost category, and at a minimum, we ask CMS not to finalize these new measures at this time.** We also urge CMS to take the steps we outlined in our [comment letter](#) on the PFS CY 2020 proposed rule to improve the cost measures, including pursuing NQF endorsement of all cost measures, re-examining the attribution methodologies, and incorporating risk adjustment for social risk factors where necessary and appropriate.

MIPS Improvement Activity Category. As it does each year, CMS proposes updates to the improvement activity inventory by proposing seven new improvement activities, three of which are focused on promoting health equity. **The AHA applauds CMS' focus on health equity, and believes using the improvement activity category is an effective mechanism to encourage the adoption of practices that can advance health equity.**

CMS also proposes a process to suspend and remove improvement activities that the agency believes raise patient safety concerns or are obsolete. CMS would use subregulatory processes (e.g., listservs, the QPP webpage) to suspend any affected improvement activities, and then use notice and comment rulemaking to formally propose the removal of the improvement activity. **The AHA supports this proposal.**

MIPS Promoting Interoperability Category.

*Reporting Period.* The AHA consistently has advocated for an EHR reporting period of any continuous 90-day period to promote program stability and reduce clinician burden. We strongly support CMS' decision, finalized in last year's PFS rule, to make the 90-day reporting period an ongoing policy for the Promoting Interoperability Category.



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*Electronic Prescribing Objective: Query of PDMP Measure.* As noted in previous comments, prescription drug monitoring program (PDMP) integration with certified EHRs continues to pose a number of challenges for eligible clinicians. **The AHA supports CMS' proposal to retain the query of PDMP measure under the electronic prescribing objective as optional and worth 10 bonus points.** We further support mitigating burden on clinicians by continuing to require only a "yes/no" attestation vs. a numerator/denominator for this measure. This appropriately recognizes that technical capabilities vary across EHRs, the reality that PDMPs do not exist in every state, and, where they do exist, can be impacted by state laws prohibiting integration and storage of PDMP data.

Key federal and private sector efforts are currently underway aimed at improving technical approaches to EHR-PDMP integration, addressing stakeholder concerns around readiness and continued implementation of key PDMP-related provisions of the SUPPORT for Patients and Communities Act (P.L. 115-271). We believe additional time for this work to mature, as well as continued assessment of the PDMP landscape, is needed prior to CMS proposing to modify the agency's current optional, attestation-based approach to this measure.

*Provider to Patient Exchange Objective.* CMS proposes modifying the Provide Patients Electronic Access to their Health Information measure to require eligible clinicians to ensure that patient health information remains available indefinitely and using any application of the patient's choice that is configured to meet the technical specifications of the application programming interface (API) in the certified EHR. This would include all patient health information from encounters on or after Jan. 1, 2016.

The AHA strongly supports patients having access to their health information. We are concerned, however, that CMS' proposed changes to the measure do not accurately reflect the realities of the EHR technology environment. This is particularly true with regard to the proposed requirement that all patient health information remain available indefinitely with a lookback to Jan. 1, 2016. It is unclear how CMS would define "indefinite," what data would be included in "all patient health information," and how potential conflicts with state laws would be reconciled.

**We appreciate that, citing many of the concerns outlined above, CMS did not finalize these proposed changes for the 2022 Hospital Promoting Interoperability Program. We urge the agency to continue its approach of aligning policies across eligible hospitals and eligible clinicians by similarly not finalizing these proposed changes for the 2022 MIPS Promoting Interoperability Category.**

With respect to third-party applications, we urge prioritization of patient privacy protections and cybersecurity considerations as their use becomes more prevalent in health care. These applications both present opportunities to allow patients to access

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their health information in new and innovative ways but also present significant risks as data increasingly flows outside of the HIPAA-protected EHR environment.

*Public Health and Clinical Data Exchange Objective.* The ongoing PHE highlights the critical importance of the ability to collect, exchange and analyze public data. Clinicians have successfully implemented reporting capabilities for key public health data over the past several years. Yet, throughout the pandemic, and in the years leading up to, it became clear that our public health agencies' (PHA) data systems are, in many cases, antiquated and often unable to receive these data electronically. Similar to the state of PDMPs discussed above, public health data systems capabilities vary widely by state and jurisdiction.

Clinicians are eager to engage in standards-based exchange of data with PHAs. We are encouraged that Congress recognized the need for investment in public health data systems and provided funding for modernization efforts in multiple COVID relief bills. While this work is underway, and at a nascent stage, expansion of this objective should be considered in the context of the current public health data reporting landscape.

The AHA is concerned that a prescriptive vs. staged approach to this measure for eligible clinicians, as proposed by CMS, does not accurately reflect the current state of PHA capabilities in many areas of the country. We are further concerned that this approach will drive reliance on exceptions rather than incentivize expanded public health reporting by eligible clinicians. **Therefore, the AHA recommends that CMS maintain the flexibility for clinicians to report on any two of the current public health and clinical data exchange measures and provide five bonus points to clinicians who voluntarily attest to a 3rd measure.** We would support an annual review of this approach based on progress of PHA data modernization efforts.

*Protect Patient Health Information Objective.* While we agree that implementing safety practices for planned or unplanned EHR downtime is important, we believe the proposed Safety Assurance Factors for EHR Resilience Guides (SAFER Guides) measure is out of scope for the Promoting Interoperability Category that was established to incentivize eligible professionals to "adopt, implement, upgrade and demonstrate meaningful use of certified EHR technology." Further, the SAFER Guides have not gone through a comprehensive review and update process since 2016, calling into question whether their content remains relevant.

Additionally, requiring this type of annual assessment of the High Priority Practices Guide would place burden on clinicians, particularly those with limited resources. CMS should work with ONC to engage in an update of the guides, informed by stakeholder input, and undertake an education and awareness campaign to disseminate information to the field.

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**Given these considerations, the AHA cannot support CMS' proposal to require eligible clinicians to attest to having completed an annual assessment of the High Priority Practices Guide.** Should CMS choose to finalize this measure, we urge the agency to provide clarification, as it did in the FY 2022 IPPS final rule for the hospital Promoting Interoperability Program, that a "no" response is acceptable and will not result in a penalty.

*Prevention of Information Blocking Attestation Requirement.* **The AHA supports CMS' proposal to remove attestation statements B and C from the prevention of information blocking attestation requirement.** We agree that the similarities between practices described in statements B and C and the practices that could constitute information blocking under ONC's information blocking regulations could create confusion for eligible clinicians. We further believe that streamlining this attestation to require only statement A more accurately reflects the statutory provision in the Medicare Access and CHIP Reauthorization Act (MACRA) law.

MIPS Complex Patient Bonus. **The AHA supports CMS' proposal to extend into the CY 2021 performance period its COVID-19 PHE policy of doubling the complex patient bonus. We thank CMS for thoughtfully considering the impact of the COVID-19 PHE in determining MIPS performance.** Since the CY 2018 performance period, CMS has calculated a "complex patient bonus" to better account for medical and social risk differences across patient populations. This bonus awards up to five points to the MIPS final scores of clinicians and groups based on their hierarchical condition category (HCC) scores, and their ratio of patients dually eligible for Medicare and Medicaid. For the CY 2021 reporting period, CMS would double the complex patient bonus such that clinicians would receive up to 10 points. We agree with CMS that the COVID-19 PHE has significantly affected patient complexity. Emerging evidence suggests that needed care for some patients has been deferred or delayed because of the COVID-19 pandemic. As a result, by the time patients receive care, their health issues may have taken on greater complexity. Additionally, COVID-19 patients themselves can have long, intensive and often complex care trajectories that can span many months after they might receive hospital services. Therefore, it is appropriate to recognize this impact by increasing the complex patient bonus.

Beginning with the CY 2022 performance period, CMS proposes significant updates to the calculation methodology of the complex patient bonus that the agency believes would more effectively target the bonus to those practices serving the largest proportions of patients with medical or social risks. First, the agency would standardize the calculation of medical and social risk scores so they are placed on a common scale. **The AHA supports the revised formulas for calculating complex patient bonus scores, and agrees that standardizing the scores is methodologically appropriate.**

CMS also proposes to limit the availability of the complex patient bonus to those eligible clinicians and groups that have least one complex patient risk (i.e., HCC score or dual



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proportion) score at or above the median. CMS believes this is appropriate because their analysis found that clinicians with a higher share of complex patients had lower MIPS final score on average than other clinicians. Said differently, the practices with lower medical and social risk scores already tended to have higher MIPS scores, and as a result, their eligibility for complex patient bonus points may inadvertently magnify the disparities in scores between lower and higher complexity practices.

**The AHA supports the concept of more effectively targeting the complex patient bonus, and agrees that the goal of the bonus should be to narrow — rather than expand — disparities in performance stemming from differences in clinical and social risk. At the same time, we caution that the selection of the median as a cutoff for receiving any complex patient bonus may be arbitrary.** We fear it may introduce a “cliff” problem in which practices with small differences in risk factor scores could experience very different complex patient bonus scores. For example, a practice whose duals proportion is in the 48th percentile may be very similar to that with a duals proportion in the 51st percentile. Yet, only the latter practice would qualify for a bonus. We understand that targeting bonus points means that CMS has to have some quantitative mechanism for creating differential scores among practices. We would encourage CMS to carefully monitor the distribution of medical and social risk factor scores over time to determine to what extent scores may be clustering around particular values. The agency should take care to ensure threshold for the complex patient bonus is set in a way that minimizes the “cliff” issue.

MIPS Performance Threshold Score. CMS proposes increasing the performance threshold for the CY 2022 performance/CY 2024 payment year from 60 to 75 points. As required by law, beginning with the CY 2022 performance period, CMS must set the performance threshold at the either the mean or median MIPS performance score from a prior payment adjustment year. In this case, CMS chose the CY 2019 payment year because it would result in a more gradual increase than the alternatives.

The AHA understands CMS’ statutory obligation to set the MIPS performance threshold at either the mean or median score of a prior year. At the same time, we are concerned that the magnitude of the increase could be challenging for the field in light of the COVID-19 PHE. That is why we have asked CMS to reconsider its proposals to remove bonus points in the quality category for reporting priority measures and performing end-to-end electronic reporting. It is also why we believe CMS should consider delaying the increase in the quality data completeness threshold. As the health care field continues to fight the COVID-19 pandemic and recovers from it, we encourage CMS to retain flexibility and reasonable opportunities for clinicians to benefit from MIPS participation.

## **Request for Information – Health Equity**

The AHA applauds CMS’ commitment to advancing health equity, and we are pleased the agency seeks input on a range of potential policy actions intended to accelerate the

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nation's progress on this vital topic. Hospitals and health systems and the clinician practices with whom they partner are working hard to identify and address health disparities and to close remaining gaps in quality performance across patient populations. The AHA and CMS share the same goal: to ensure that all patients feel valued and recognized, and that the care they receive does not vary due to race, ethnicity, gender, sexual orientation or other demographic or social risk characteristics.

General Considerations. Most of the policy ideas shared in the RFI focus on the collection, analysis and use of health equity-related data within the context of CMS' existing framework of quality measurement and value programs. We certainly understand this focus, given both the visibility and importance of CMS' quality measurement programs, and the vital need to have reliable, accurate and actionable data to both identify disparities and track progress over time. As CMS continues to work with the health care field to advance equity and considers advancing its use of equity data, our members have asked that CMS:

- *Work to foster alignment and standardization of approaches to collecting, analyzing and exchanging demographic and social risk data.* This includes a consistent approach across CMS itself, and across other federal agencies and programs. Given the breadth of health equity issues, and the wide range of stakeholders affected by it, CMS can help ensure that all stakeholders use consistent definitions and standards. Furthermore, such standards should be thoroughly field tested before broader implementation.
- *Ensure that equity data use and collection efforts are aligned with CMS' broader goals and strategy related to health equity.* In other words, the collection, use and analysis of data should not be done in isolation and should be linked to achieving specific goals in CMS' strategy.
- *Identify and share more broadly data to which CMS itself may have access.* For example, to the extent CMS is collecting demographic and social risk data during the time of Medicare enrollment, the agency should explore ways of determining whether this information could be linked to quality data. These steps could help provide additional data for CMS' efforts to identify disparities in performance and outcomes.
- *Be judicious in requests for new data and ensure any efforts to collect equity data achieve an appropriate balance of value to advancing health equity and administrative burden.* As CMS notes in the proposed rule, "the development of consistent and sustainable programs to collect data on social determinants of health can be considerable undertakings." Indeed, data reporting often involves investments in systems and personnel as well as redesigns of workflows to ensure data can be captured. However, certain types of data (e.g., living situation, sexual orientation and gender identity) also may sensitive for patients

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to disclose. We encourage CMS to engage patients and providers extensively as it explores additional data collection.

Measure Stratification and Indirect Estimation. The AHA would support providing clinicians and group practices with confidential reports that stratify their performance on MIPS measures by race, ethnicity, dual eligible status, and other demographic and social risk factors of interest. To identify disparities, clinicians and their hospital partners need good data to know whether they exist for particular measures or for particular dimensions of health equity. Stratified reports are one helpful tool for illuminating disparities in care.

As we understand it, one of the methods CMS is considering for creating these stratified reports is indirect estimation. Given the gaps in available demographic data for Medicare beneficiaries, CMS is considering using data from existing sources like the U.S. Census and Medicare administrative data (e.g., first and last names, and the racial and ethnic composition of the patient's neighborhood) to "impute" (i.e., infer) the demographic composition of the patient populations of clinician practices.

**While the AHA appreciates that CMS is trying to make the highest use of the data it has, we are concerned about the potential for indirect estimation to lead to measurement bias.** As CMS notes, the "gold standard" for race, ethnicity and other demographic data is patient self-reported information. Furthermore, the quality of the indirect estimation model would be only as good as the data that go into it. To the extent CMS draws on data from the census, we expect the data could lag the actual demographic composition of a hospital's patient population by several years. This would limit the usefulness of analyses based on indirect estimation. At a minimum, we urge CMS not to use indirect estimation in any public-facing analysis of equity performance.

## **Request for Information – Digital Quality Measurement**

The proposed rule includes a request for comment on CMS' plans to advance the use of digital quality measures (dQMs) and expand the agency's use of Fast Healthcare Interoperability (FHIR) standards and Application Programming Interfaces (APIs) for both current eCQMs and future quality measures. CMS states that its goal is "to move fully to digital quality measurement" by 2025 and to enhance the interoperability of quality measure data.

The AHA agrees that a digital and interoperable quality measurement enterprise is a laudable long-term goal that could have positive and far-reaching impacts to quality of care and the provider experience. The AHA also sees significant potential in expanding the use of FHIR, as this standard is easier to implement and more fluid than many other available frameworks. At the same time, transitioning to only dQMs in CMS quality measurement programs will prove a staggeringly complex task. In this rule, CMS offers a working definition of dQMs and a long list of laudable attributes for dQMs. The agency



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also correctly identifies the need to work with multiple stakeholders. While all of these things are helpful and necessary, they are not by themselves enough to ensure a successful transition to dQMs. This also is why it is difficult for AHA to judge whether CMS' stated goal of transitioning to fully dQMs by 2025 is achievable; given the complexity of the task, we are skeptical.

**For these reasons, we urge CMS to propose a clearer overarching plan and goals for its proposed transition to dQMs.** CMS should specify what steps it expects for hospitals and other stakeholders to take, the sequencing and timing of those steps, and identify any interdependent steps and policies across CMS, ONC and any other relevant federal agencies. We also believe that any new standards or processes that emerge from this plan would need to be adequately vetted and field-tested before they are made into regulatory requirements. The AHA and our members would be pleased to engage CMS in such a planning process.

Below we offer comments on several specific issues included in the RFI and provide additional recommendations to the agency.

dQM Definition. CMS' proposed definition of dQMs is very broad and lists a range of data sources, including administrative systems, clinical assessment data, case management systems, EHRs, instruments (e.g., wearable medical devices), patient portals, health information exchanges (HIEs), registries and "other sources." Hospitals do not manage some of these sources themselves; yet, their performance on a dQM could be linked to such data. We are concerned that the accuracy and reliability of dQMs could be compromised by poor data quality from outside sources. For these reasons, CMS, ONC and other stakeholders may need to consider the development of source system verification and/or certification criteria.

dQMs as Self-Contained Tools. In the RFI, CMS offers a lengthy list of attributes and functionalities that dQMs could have. This ranges from simple tasks like the ability to generate measure score reports, to considerably more complex tasks like being "compatible with any data source" and "having the ability to adopt to emerging advanced analytic approaches like natural language processing." The AHA encourages CMS to work across stakeholders to determine whether these attributes can be sequenced and scaled. We are skeptical that all of the attributes on CMS' proposed list would be achievable for even a single dQM by 2025, whereas certain attributes may be achievable by that point.

Public-Private Sector Collaboration. The AHA is pleased that CMS is considering the development of a "common portfolio" of dQMs that could be used across federal program and agencies, and with private sector quality measurement programs. Hospitals and their affiliated clinical practices have long aspired to an approach to quality measurement that enables them to report data only once and have it used for multiple purposes. Unfortunately, they continue to face discordant reporting

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requirements among federal, state and private sector quality reporting and value programs. Even when the measure topics are the same, often there are differences in measure design across programs that result in the need for duplicative data collection, excess costs and confusion. As CMS advances a plan for dQMs, we encourage the agency to prioritize the development of dQMs that are usable across the public and private sector.

## Medicare Shared Savings Program (MSSP)

In this rule, CMS includes proposals related to the MSSP quality measurement approach and other programmatic features of the MSSP.

Quality Measurement Proposals. In last year's PFS final rule, CMS adopted a policy in which it reduced the MSSP quality measure set to the same to the same six measures used in the MIPS APP, eliminated the web interface reporting option and its associated measure set, and increase the quality performance standard ACOs would have to achieve to qualify for shared savings or avoid owing maximum losses.

In response to concerns from AHA and other stakeholders about the proposal, CMS proposes a longer phase-in of the requirement to report the APP performance measure and a delay to the increase of the minimum quality standard. For the CY 2022 MSSP performance year, ACOs would be permitted to report either the current MSSP measure set via the CMS web interface, or the MIPS APP measure set. In CY 2023, those ACOs that choose the report the web interface measure set also would be required to report at least one measure from the APP measure set. CMS also proposes to delay the increase of the minimum quality standard from the 30th to the 40th percentile until the CY 2024 performance year. **The AHA supports these proposals, and thanks CMS for responding to stakeholder concerns about the pace of implementing the APP measure set.**

**However, the AHA also again urges CMS to retain pay-for-reporting for first year of MSSP participation, as well as pay-for-reporting for newly added or significantly revised measures.** For first-time participants in the MSSP, it takes significant resources to learn measure specifications, assess baseline performance and implement workflow changes — IT and otherwise — necessary for accurately capturing and improving quality performance. Furthermore, when CMS makes significant changes to existing measure specifications, providers must make several of these same adaptations. Given that CMS now scores MSSP ACOs on improvement over time, it is essential for CMS to establish an accurate performance baseline. Pay-for-reporting periods give ACOs the opportunity to ramp up their measurement and improvement capabilities in a sustainable fashion before their shared savings or losses are tied to quality performance.

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We also encourage CMS to use the time afforded by the longer phase-in to explore potential challenges with the new APP measure set. The AHA has expressed concerns that the APP measure set may not be the best suited to assessing ACO performance, and we encourage CMS to obtain multi-stakeholder feedback on the suitability of the measure set. We were disappointed the APP measure set was not reviewed as a whole by the Measure Applications Partnership (MAP) before it was adopted for MSSP, and we again encourage CMS to seek the MAP's input.

Revisions to the Definition of Primary Care Services Used in MSSP Beneficiary Assignment. Over the course of the MSSP, CMS has periodically updated the list of primary care services adopted for the purpose of beneficiary assignment. In this rule, CMS proposes adding several additional codes to the definition of primary care services for Performance Year 2022, including codes describing chronic care management, prolonged office or other E/M services, prolonged audio-only virtual check-in (if finalized in this rule). CMS also proposes to allow telephone E/M codes (CPT codes 99441 through 99443) to continue to be used for beneficiary assignment until they are determined to no longer be payable under Medicare FFS telehealth policies. **The AHA strongly supports these proposals and urges CMS to finalize them.**

Risk Adjustment of ACOs' Historical Benchmark. In this rule, CMS requests comment on issues related to its risk adjustment methodology. The current risk adjustment methodology that CMS uses to adjust ACOs' historical benchmarks for changes in severity and case mix is subject to a cap of positive 3% for the entire agreement period. This means that any risk score growth between Benchmark Year 3 and any performance year in the agreement period cannot be larger than 3%. CMS mentions in the rule that stakeholders have expressed concern that this may not allow the agency to fully account for risk score growth in the ACO's regional service area, thereby penalizing them. **The AHA agrees that the positive 3% cap imposes artificial penalties on ACOs and will be especially problematic in light of the COVID-19 pandemic.**

**As described in our [comments](#) to the Pathways to Success rule, the AHA believes a 3% cap on risk scores is too low and the five-year period over which it is spread is too long.** For example, the 3% cap on risk scores is too low to capture the significant turnover and changes in health status that ACO beneficiaries experience. This is especially true as the burden of illness in the Medicare population increases over time. It is also complicated by COVID-19, during which there were significant decreases in patient encounter volume. As a result of these decreases, ACOs were unable to capture large swaths of beneficiaries' hierarchical condition categories (HCCs), upon which MSSP risk adjustment is based. Thus, most ACOs risk scores for 2021 will be extremely low. If in-person patient volume resumes in 2021, 2022 and beyond, and ACOs are once again able to capture their beneficiaries' risk scores, ACOs will likely have a significant increase in risk scores simply because patients returned to the office. Capping the risk score growth at 3% will artificially penalize ACOs for patients' need to stay in the safety of their homes during the pandemic.



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**Suppressing the payment of ACOs that were largely successful in navigating the pandemic and saved Medicare \$1.9 billion in 2020 is inappropriate and counterproductive. At the least, we urge CMS to raise the cap to at least 5%, as included in the Value in Health Care Act of 2021(H.R. 4587) that the AHA and several other organizations support.**

We also recommend that CMS apply the risk score cap on an annual basis, allowing risk scores to change by +/-5% year-over-year throughout the agreement period. This is especially important for ACOs in high churn areas; the patients with which these ACOs begin a year look very different from the patients they serve the following year. Freezing risk scores over five years could create a constant struggle against an outdated risk score under which ACOs are at risk for a population whose risk score was calculated several years prior. Such a situation could create a level of risk some ACOs cannot bear, deterring them from entering or remaining in the MSSP. CMS has already recognized the necessity of shorter-term caps on risk and price adjustments; the agency capped trend factor variation in the Bundled Payments for Care Improvement program on a quarter-over-quarter basis and risk scores in the Next Generation ACO program at 3% over two years.



***Via electronic submission ([www.regulations.gov](http://www.regulations.gov))***

September 13, 2021

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The Honorable Chiquita Brooks-LaSure  
Centers for Medicare and Medicaid Services  
Department of Health and Human Services  
Hubert H. Humphrey Building  
200 Independence Ave., SW  
Washington, DC 20201

Attention: CMS-1751-P

***Re: Medicare Program; CY 2022 Payment Policies Under the Physician Fee Schedule and Other Changes to Part B Payment Policies; Medicare Shared Savings Program Requirements; Provider Enrollment Regulation Updates; Provider and Supplier Prepayment and Post-Payment Medical Review Requirements (CMS-1751-P)***

Dear Administrator Brooks-LaSure:

The Association of American Medical Colleges (“the AAMC” or “Association”) welcomes this opportunity to comment on the Centers for Medicare & Medicaid Services (CMS) 2022 Physician Fee Schedule and Quality Payment Program (QPP) proposed rule published July 13, 2021 (86 Fed. Reg. 39104). The AAMC (Association of American Medical Colleges) is a nonprofit association dedicated to transforming health through medical education, health care, medical research, and community collaborations. Its members are all 155 accredited U.S. and 17 accredited Canadian medical schools; approximately 400 teaching hospitals and health systems, including Department of Veterans Affairs medical centers; and more than 70 academic societies. Through these institutions and organizations, the AAMC leads and serves America’s medical schools and teaching hospitals and the millions of individuals employed across academic medicine, including more than 186,000 full-time faculty members, 94,000 medical students, 145,000 resident physicians, and 60,000 graduate students and postdoctoral researchers in the biomedical sciences.

Through their mission of providing the highest quality patient care teaching physicians who work at academic medical centers (AMCs) provide care in what are among the largest physician group practices in the country, often described as “faculty practice plans” because many of these physicians supervise medical residents and students as part of their daily work. They are typically organized into large multi-specialty group practices that deliver care to the most complex and vulnerable patient populations, many of whom require highly specialized care. Often care is multidisciplinary and team-based. These practices are frequently organized under a single tax identification number (TIN) that includes many specialties and subspecialties. Recent data shows that faculty practice plans range in size from a low of 128 individual national provider identifiers (NPI)s to a high of 4,319 NPIs, with a mean of 989 and a median of 816. These practices support the educational development of residents and physicians who will

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become tomorrow's physicians. Teaching physicians also provide significant primary care services to patients in their local communities.

In addition to primary care, teaching physicians provide other critical services for their local communities, including a large percentage of tertiary, quaternary, and specialty referral care. Also, teaching physicians may have a patient base that spans regions, states and even the nation. They also treat a disproportionate share of patients for whom social determinants of health, such as housing, nutrition, and transportation, contribute significantly to additional health challenges, adding greater complexity to their care. Academic medical centers, where teaching physicians work, deliver a disproportionate share of undercompensated and uncompensated care.

The COVID-19 pandemic has posed enormous challenges and placed tremendous stress on our entire health care system – and teaching hospitals, medical schools, and teaching physicians have mobilized on all fronts to contain and mitigate COVID-19. We thank CMS for reducing regulatory burden and providing flexibility during the public health emergency (PHE). These flexibilities have enabled providers to be more innovative in their care of patients. We believe that many of these changes, such as the expansion of telehealth and use of other communication-based technologies, can provide greater access and improved care if they are continued in the future.

The AAMC commends CMS for its commitment to promoting health equity and expanding patient access to comprehensive care. The COVID-19 pandemic has highlighted the gap in health equity as data have shown the virus has disproportionately affected Black, and Latinx, American Indian/Alaska Native, Asian-American, and Pacific Islander communities. We share CMS' goal to reduce disparities in health care and support initiatives to close the equity gap. Our members have been working to implement new strategies aimed at promoting health equity.

While we support the direction CMS has taken on some issues, we also are concerned about some of proposed policies in the rule, especially those that are made more problematic by the COVID-19 pandemic. Among those is the significant reduction to the Medicare conversion factor in 2022 due to budget neutrality. Payment reductions are a major problem at any time, but to cut payment at a time when teaching physicians and other health care professionals are on the frontlines treating COVID-19 patients while at the same time caring for a large number of patients who postponed needed care because of COVID-19, would be devastating to their practices and the patients they treat.

We are committed to working with CMS to ensure that Medicare payment policies ensure access to high quality care for patients, accurately reflect the resources involved in treating patients, are not overly burdensome to clinicians, and reduce health disparities. We believe that there is much that we can learn from care delivery during the PHE to improve access for all.

The AAMC's key recommendations on the 2022 proposed rule include the following:

#### **PHYSICIAN FEE SCHEDULE**

- ***Payment Updates and Budget Neutrality:*** The AAMC encourages CMS to support stakeholder's efforts to urge Congress to maintain the 3.75% increase to the Conversion Factor for at least 2022 and 2023, and to prevent the additional potential reductions in 2022



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due to sequestration. If Congress does not take action on budget neutrality before January 1, 2022, we strongly urge HHS to use the public health emergency declaration as a basis to ensure access to care and mitigate financial impacts due to the COVID-19 pandemic by waiving budget neutrality adjustments.

- ***Clinical Labor Update to Practice Expense:*** The AAMC strongly recommends that at a minimum, CMS transition the clinical labor pricing updates over a 4- year period to help to mitigate the impact of the steep cuts on certain specialties.
- ***Split (Shared Visits):*** CMS should determine the “Substantive Portion” of a split (shared) visit based on medical decision-making and allow shared visits in institutional and non-institutional settings for new and established patients. We oppose defining “substantive portion” based on the time.
- ***Critical Care Visits:*** The AAMC urges CMS to take time to investigate further and seek input from stakeholders before implementing changes to the critical care visit policies. CMS should continue to allow payment for E/M visits and critical care services for the same patient on the same day by practitioners in the same specialty as appropriate. CMS should not bundle critical care visits in the global surgical package.
- ***Teaching Physicians:*** The AAMC supports CMS’ proposal that when total time is used to determine office/outpatient E/M visit level, only the time that the teaching physician was present should be included, and for the primary care exception, only medical decision-making should be used to select the E/M visit level. We urge CMS to permanently allow virtual supervision (using real-time audio/video communications technology) of residents in all geographic locations.
- ***Virtual Supervision:*** The AAMC recommends CMS continue to allow direct supervision for services billed “incident to” a physician’ service to be met through virtual supervision on a permanent basis.
- ***Category 3 Telehealth Services:*** The AAMC strongly supports retaining the services on the Category 3 list of services until the end of 2023 as an option to temporarily allow services to be billable, while the benefits are studied. We also recommend CMS implement the concept of Category 3 as a permanent option.
- ***Telehealth for Mental Health Services:*** The AAMC strongly supports the proposal to implement changes in the Consolidated Appropriations Act of 2021 that allow coverage and payment for telehealth for mental health services in all geographic regions and to allow the patient’s home as an originating site for these services. We recommend that CMS pay for these telehealth services without requiring an in-person visit every 6-months.
- ***Audio-only for Mental Health Services:*** The AAMC strongly supports the use of audio-only communication to provide mental health services. We believe services provided by audio-only technology should not preclude higher-level mental health services, for example, level 4 and level 5 E/M.
- ***Telehealth in Rural Health Clinics (RHCs) and Federally Qualified Health Centers (FQHCs):*** The AAMC strongly supports the proposal to allow RHCs and FQHCs to furnish telehealth services for mental health.
- ***Telehealth in Rural Emergency Hospitals:*** The AAMC strongly supports establishing a rural emergency hospital as a telehealth originating site starting in 2023.
- ***Virtual Check-in and Audio-Only:*** While the AAMC supports the establishment of HCPCS code G2252 for virtual check-in visits for longer units of time, the AAMC strongly urges

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CMS to continue to allow separate payment for the telephone E/M codes (99441-99443) after the public health emergency ends. Health system data shows that audio-only is an important access point, particularly for Medicare beneficiaries who may not have access to, or may not feel comfortable with, interactive audio/video technologies.

- ***Remote Therapeutic Monitoring (RTM) Codes:*** The AAMC commends CMS for establishing five new RTM codes that allow data to be self-reported as well as digitally uploaded. We recommend CMS remove the specialty and condition-specific limitations in the code definitions which create unnecessary barriers.
- ***Appropriate Use Criteria Program:*** The AAMC supports CMS's proposal to delay enforcement of the Appropriate Use Criteria (AUC) program by at least one year until the later of January 1, 2023, or the January 1 that follows the end of the COVID-19 PHE. We strongly recommend that CMS exclude advanced diagnostic imaging services that are performed as part of a clinical trial from the AUC program.

#### **MEDICARE SHARED SAVINGS PROGRAM (MSSP) ACOS**

- ***Web Interface for ACOs:*** To give ACOs more time to prepare for quality reporting changes, we urge CMS to finalize its proposal to maintain the Web Interface as a reporting option for ACOs for at least the next two years while also allowing ACOs the option of using other reporting mechanisms. We ask that CMS remove its proposal to require reporting on at least one eQMs/MIPS CQM in 2023.
- ***Regional Benchmarks:*** The AAMC urges CMS to remove ACO Beneficiaries from the regional benchmark to ensure ACOs are not penalized as they achieve savings for their assigned populations.
- ***3 Percent Cap on Risk Score Growth:*** The AAMC recommends CMS re-evaluate the current 3 percent cap on risk score growth in light of the COVID-19 PHE and evaluate the inclusion of social risk factors into risk adjustment models for ACO benchmarking.

#### **QUALITY PAYMENT PROGRAM**

- ***MIPS Value Pathways (MVPs):*** The AAMC strongly supports CMS' proposal to delay implementation of the MVPs until 2023. The MVPs should be gradually implemented to ensure that they are meaningful for clinicians and their patients, and not burdensome to report.
- ***Sunsetting MIPS After 2027:*** The AAMC has significant concerns with sunseting the traditional MIPS program at the end of 2027, making MVPs or the APP performance pathway the only mechanism for participating in the quality payment program. There are a number of conceptual challenges with the MVP program and sufficient time will be needed to address them before sunseting traditional MIPS.
- ***MVPs Should be Voluntary:*** Under the MIPS program, the practices should be given the opportunity to assess the advantages and disadvantages and select whichever option is most meaningful and least burdensome for reporting in the MIPS program.
- ***MVPs and Large Multi-Specialty Practices:*** With the large number of distinct specialties reporting under a single tax identification number (TIN) in academic medical centers, the AAMC believes it would be very challenging to identify MVPs that would be meaningful for

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all specialties in the practice. The AAMC supports CMS' proposal that other physicians in the group practice (same TIN) who are not affiliated with the subgroup that is participating in an MVP would retain the option to participate as a group practice in traditional MIPS.

- **Subgroups:** The AAMC supports the concept of subgroup identifiers that would allow reporting and performance measurement at the subgroup level. The physician practice should be allowed to identify and provide a list to CMS of the physicians within a subgroup.
- **Removal of Web Interface:** The AAMC strongly urges CMS to provide a gradual transition away from the use of the Web Interface reporting option. We support CMS' proposal to continue the Web Interface for at least one additional year to give sufficient time for affected practices to implement a new reporting method.
- **Cost Category:** Given the multiple concerns under the cost performance category, including the impact of COVID-19 on patterns of care, clinicians' lack of familiarity with cost measures, the need for risk adjustment, and the need for better attribution methodologies, the AAMC strongly urges CMS to maintain the weight of the cost category at 20%.
- **Risk Adjustment:** As appropriate, the AAMC recommends CMS risk-adjust outcome measures, population-based measures, and cost measures for clinical complexity and sociodemographic factors.
- **Advanced Alternative Payment Models:** The AAMC recommends CMS support any Congressional efforts that would give the Agency the discretion to set the thresholds to be qualified participants in an advanced APM at an appropriate level to encourage APM participation.

## REQUESTS FOR INFORMATION

- **Potential Efforts to Address Health Equity in the QPP:** CMS should take a thoughtful and considered approach working with stakeholders to improve data collection in order to better measure and analyze disparities in a manner that builds an evidence-based, valid, and reliable framework towards provider accountability for health equity.
- **Future Stratification of Hospital Quality Measures by Race and Ethnicity:** CMS should invest in data collection improvements that standardize and use data already collected by hospitals. The Agency also should encourage the reporting and use of actionable data on health-related social needs instead of using indirect estimates of race and ethnicity data to stratify measure reporting. Race and ethnicity themselves are not risk factors and reliance on immutable characteristics alone is not informative for intervention.
- **Improving Demographic Data Collection for Quality Measurement:** CMS should pursue a policy supporting the collection of standardized multi-sector risk information that will aid improved stratification and risk adjustment beyond individual-level demographic data elements. Data collection and systems for capturing unmet social need at the individual and community levels should be used in conjunction to best identify disparities in quality and equity and guide interventions for improvement.
- **Advancing Digital Quality Measurement:** CMS should refine its definition of digital quality measures to focus first on currently available valid and reliable digital data sources, set clear and specific parameters for what the agency hopes to achieve, and make clear what it expects of providers as it aims to transition to digital quality measurement by 2025.



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## PHYSICIAN FEE SCHEDULE

### **PAYMENT UPDATES**

#### **Update to the Physician Fee Schedule Conversion Factor for 2022**

##### ***The 3.75% Increase to the Conversion Factor Should be Maintained and Sequestration Cuts Should be Prevented***

In the proposed rule, CMS sets forth the dollar conversion factor that would be used to update the payment rates. For 2022, the conversion factor would be \$33.58, which is a 3.75% reduction from the 2021 conversion factor. This reflects the expiration of the 3.75 percent increase for services furnished in 2021 under provisions included in the Consolidated Appropriations Act of 2021 (CAA, P.L. 116-260).

On top of this 3.75% CF reduction, on January 1, 2022 physician practices are facing additional payment cuts from the expiration of the moratorium on the Medicare 2% sequester reduction and imposition of a 4% PAYGO sequester reduction that was triggered by the increase in spending under the American Rescue Plan Act. Taken together, these three cuts would total a 9.75% reduction in payment. In addition, physicians face a statutory freeze in annual Medicare PFS updates until 2026, when updates will resume at a rate of only 0.25%, which is well below the rate of inflation.

We are deeply concerned about the significant cuts that many clinicians will experience. Payment reductions of this magnitude would be a major problem at any time, but to impose these large cuts at a time when teaching physicians and other health care professionals continue to be on the front lines treating patients with COVID-19 will be devastating.

The COVID-19 pandemic has caused significant disruption to physician practices. Physician practices are still recovering from the financial impact of the COVID-19 PHE. Faculty practices have estimated that they have lost between 25% and 50% of their revenue in April and May 2020 as compared to 2019. While the telehealth waivers and flexibilities granted by CMS were beneficial to physicians and their patients, payment for telehealth services only made up a small portion of this lost revenue. In addition, practices benefited from the stimulus funds provided by the Coronavirus Aid, Relief, and Economic Security (CARES) Act (P.L. 116-136), but these much-appreciated dollars have not filled the gap from financial losses stemming from the pandemic. While Congress authorized \$186.5 billion in relief funds to compensate providers for expenses and lost revenue due to COVID-19, a significant portion of the CARES funds remain undistributed.

Continued implementation of infection control protocols has also increased the cost of providing care. Practices have had to purchase additional protective equipment (PPE), update cleaning protocols, maintain adequate social distancing, create physical barriers, and undertake other costly measures.

Physician well-being has been measured and found to be low due to concerns regarding their well-being and that of their staff and family, increased hours of care, and challenges with providing care during a pandemic that requires additional procedures and protocols. Payment for services should be commensurate with services provided during an extremely challenging time

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for the country. An almost 10% cut in physician payment will add to the stress and is likely to trigger further retirement or reduction in physician services during a time when physicians are needed the most.

We are concerned that the additional reductions in revenue from the budget neutrality adjustments and sequester could result in significant access problems for patients. **Given these unprecedented challenges and the critical importance of patient access to health care services, we encourage CMS to support stakeholders' efforts to have Congress maintain the 3.75% increase to the Conversion Factor for at least 2022 and 2023, and to prevent the additional reductions in 2022 due to sequestration. If Congress does not take action on budget neutrality before January 1, 2022, we strongly urge HHS to use the public health emergency declaration as a basis to ensure access to care and mitigate financial impacts due to the COVID-19 pandemic by waiving budget neutrality adjustments.** This will help to ensure that physicians and other health care providers can continue to provide high quality care to their patients. While CMS does not have explicit authority to waive the budget neutrality requirements for the PFS under section 1135 of the Act, CMS has waived other provisions of statute or regulations not specifically waivable under section 1135 of the Act using the PHE as its justification. For instance, CMS has waived the provider-based rules in their entirety without an explicit waiver authority.

Looking ahead, we believe that there are ongoing structural problems with the Medicare Physician Fee Schedule that need to be addressed. Medicare provider payments have been constrained for many years by the budget neutrality system. The updates to the conversion factor have not kept up with inflation, while the cost of running a medical practice has increased significantly. The budget neutrality requirement has led to arbitrary reductions in reimbursement. We would welcome an opportunity to work with CMS, Congress, and other stakeholders to address these long-term challenges in the future.

#### ***CMS Should Phase-In Clinical Labor Pricing Updates to Minimize Redistributive Effects***

CMS proposes to update the clinical labor pricing for 2022 (using 2019 BLS data) in conjunction with the final year of the supply and equipment pricing update. Clinical labor rates were last updated in 2002 using Bureau of Labor Statistics (BLS) data. The updated data significantly increases the overall pool of direct costs. CMS explains in the rule that specialties that perform high supply and equipment procedures would receive a decrease in payment due to this change, and office-based specialties with high clinical labor costs would benefit from this change. Because the PFS is budget neutral, any changes to the codes that increase the payment amounts under the fee schedule need to be offset by decreases elsewhere within the fee schedule.

Table 135 in the rule (86 Fed Reg 39563) shows that certain specialties, such as vascular surgery, interventional radiology and radiation therapy centers would see significant decreases from this change in clinical labor, while family practice, endocrinology, and portable X-ray suppliers will experience increases. Analysis of a database of claims data from faculty physician practices (CPSC) showed that when combined with the 3.75% CF reduction, there would be significant reductions in payment for the following specialties: interventional radiology (-17.8%), vascular surgery (-15%), medical oncology with infusion (-9.0%), and pathology: clinical (-9%). While we recognize the need to update the clinical labor data, we are deeply concerned about the redistributive impacts on specialties. Significant reductions in payment to these specialties could

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reduce access to medically necessary services. These reductions would be very difficult for these specialties to absorb, particularly given the financial losses due to the COVID-19 pandemic and the fact that there are no payment updates in the fee schedule for 6 years from 2020-2025.

Given these potential significant shifts in payment, CMS is considering the use of a 4-year transition to implement the clinical labor pricing update. **AAMC strongly recommends that at a minimum, CMS transition these clinical labor pricing updates over a 4- year period to help mitigate the impact of that such steep cuts may have on access to care. As discussed previously in this letter, we urge CMS to work with the medical community and others to encourage Congress to waive budget neutrality or take other necessary steps that would mitigate the impact of these changes to clinical labor.**

#### **Solicitation for Impact of Infectious Disease on Codes and Rate Setting**

CMS recognizes that physicians have incurred many additional costs due to the COVID-19 pandemic. The Agency seeks comments on whether Medicare should make changes to payments for services or develop separate payments to account for these PHE-related costs, such as disease control measures, research related activities, and PHE-related preventive or therapeutic counseling services. While the COVID-19 pandemic has posed enormous challenges and placed tremendous stress on our entire health care system, teaching hospitals, medical schools, teaching physicians, and researchers have mobilized on all fronts to treat and mitigate COVID-19. For academic medical centers, ensuring the health and safety of their health care workers and the patients they serve has been of primary importance. They have made substantial investments to achieve this goal as well as comply with the Centers for Disease Control and Prevention (CDC) guidelines and OSHA requirements related to COVID-19. Our members have supplied personal protective equipment to employees, updated cleaning and disinfecting standards, followed additional infection control standards, established protocols for screening employees and visitors (e.g., check patient temperatures on arrival pre-screening phone calls), limited the number of patients in waiting rooms, provided employee training, made structural changes to facilities, and much more.

In September 2020, the CPT Editorial Panel approved CPT code 99072 to address the financial impact of the new protocols related to COVID-19 in practices. CPT code 99072 is used to report the additional supplies, materials, and clinical staff time over and above the practice expenses included in an office visit when performed during a PHE. **We urge CMS to allow payment for CPT code 99072 to account for these additional costs during the PHE.**

#### **E/M Clarifications (Split/Shared Visits, Critical Care, Teaching Hospitals)**

Effective January 1, 2021, CMS implemented major revisions to office and outpatient E/M visits, which allow physicians to select the E/M visit level to bill based on either total time spent on the date of the patient encounter or medical decision-making used to provide the visit. Because of these changes, CMS is proposing clarifications regarding split (or shared) visits, critical care services, and teaching physician visits.



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**Split (or Shared) Visits**

***CMS Should Determine the “Substantive Portion” of Split (Shared) Visit Based Only on Medical Decision-Making***

CMS proposes to define a split (or shared) visit as an E/M visit in the facility setting that is not “incident to” and is performed by both a physician and a non-physician practitioner in the same group. Under the proposal, only the physician or nonphysician practitioner (NPP) who performs the substantive portion of the split (or shared) visit would be allowed to bill for the visit. CMS proposes that the physician or NPP who provides the substantive portion is the one who performs more than 50% of the total time. The distinct time of the service spent by each physician or NPP would be summed to determine total time. Even though CMS proposes to define the substantive portion based on time, CMS clarifies that the practitioner providing the substantive portion of the visit could still select the level of the split (shared) visit based on medical decision-making. The medical record must identify the 2 individuals who performed the visit and be signed and dated by the individual who performed the substantive portion.

CMS explains that manual instructions that were withdrawn in May 2021 contained several definitions of “substantive portion.” One section defined substantive portion as any face-to-face portion of the visit while another section defined it as one of the three key components of a visit (either history of present illness [HPI], physical exam, or medical decision-making). CMS feels that defining “substantive portion” as one of these three components is no longer a viable approach since HPI and physical exam are no longer required for outpatient/office E/M visits.

**We strongly urge CMS not to finalize the definition of “substantive portion” of the visit based on time. Instead, we recommend that CMS determine who is responsible for the “substantive” portion based on the physician or NPP who performs the key medical decision-making component of the service that is used to determine the visit level.**

While CMS asserts that “time is a more precise factor than medical decision-making to use as a basis for deciding which practitioner performs the substantive portion of the visit,” time is not always the essence of patient care. Physicians are compensated for their ability to synthesize complex medical problems and undertake appropriate treatment actions. An NPP may be involved in tasks that require significant time, such as preparing the medical record, taking a history, performing a physical exam, inputting orders, obtaining lab or test results, requesting consultations, and doing preliminary documentation. Synthesizing the patient’s symptoms and other information such as test results and then devising the plan of care are the substance of the visit and typically are done by a physician. However, in many instances the activities performed by the physician, which are the key portion of the visit, take less time than the activities that are required to provide the additional information needed for medical decision-making and the plan of care. This lower physician time is likely related to the fact that the NPP gathered the disparate data for careful review or because of the experience and training of the physician. For example, if an NPP and surgeon both see a patient after surgery, the NPP may spend more time gathering information, but it is only the physician who can make the critical decision to return to the operating room. In another example, for patients with cancer the oncologist (not the NPP) makes the key recommendations of chemotherapy and radiation protocols. Time can be measured but measurement doesn’t make it the most critical component of a complex medical decision.

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CMS recognizes that this proposed policy would require practitioners to track and document the time that they spent on these visits, even though they would be able to select the visit level based on medical decision-making. However, CMS believes that practitioners are likely to increasingly time their visits for purpose of visit level selection independent of the split (or shared) visit policies, given the recent changes to the E/M guidelines. We believe that this assumption is incorrect. Currently, the vast majority of physicians are selecting the outpatient/office E/M visit level based on medical decision-making (not time). In addition, the office/outpatient E/M visit policies on time for selection of level and documentation do not apply to the inpatient hospital E/M visits. As a result, most physicians are **not** tracking and documenting their time. Tracking the precise time spent by the physician and NPP (including when it is spent simultaneously) and summing it together to determine the total time, and 50% threshold, would be extremely burdensome to physicians and NPPs, particularly when they are not using time to select the visit level. Tracking the time is only important for billing purposes when selecting E/M level based on time and does not benefit patient care. However, it would place a significant regulatory burden on both the physician and NPP.

Regarding the Medical Record Documentation section, we do not support the proposal that only the billing provider sign and document the medical record entry for the split (shared) visit. We recommend that all clinicians sign, date, and time their documentation in the inpatient medical record. When providing team-based care, it is important to know which practitioners were involved in providing the service and for the note to reflect their contributions.

***Split (Shared) Visits Should be Allowed for New and Established Patients and Initial and Subsequent Visits***

The AAMC supports CMS' proposal to allow the physician and NPP to bill for split (or shared) visits for both new and established patients, and initial and subsequent visits. This approach is consistent with the CPT E/M Guidelines for split (or shared) visits. This change will support the team-based approach to care where physicians and NPPs work together to coordinate and manage care at initial visits with the patient and follow-up visits.

***Split (Shared) Visits Should be Allowed in SNFs/NFs and Ambulatory Care Settings***

CMS proposes to allow billing of split (or shared) visits, including critical care visits, when they are performed in any institutional setting. Previously, CMS did not allow practitioners to bill for split (or shared) visits that are SNF/NF visits or critical care services or procedures. We support CMS' proposal to allow split (shared) visit billing for SNF/NF visits. The practice of medicine has changed to a more team-based approach to care, and we believe this policy will support team-based care and the evolving role of NPPs. There is close coordination when a visit is shared between a physician and an NPP in the same group practice.

**We urge CMS to expand its policy to allow split (shared) visits in both institutional and non-institutional settings (i.e., office settings).** Practice has evolved, especially in academic medical centers, to a more team-based approach to furnishing care in both institutional and non-institutional settings. In some specialty settings it is common for both a physician and an NPP to share a visit for the same patient in the office setting and to closely coordinate that care.

CMS states that it does not see a need for split (or shared) visit billing in the office setting because the "incident to" regulations govern the situations where the NPP works with a

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physician who bills for the visit. While we agree that there are instances when the services could be billed “incident to,” there are also circumstances where services are provided by both the physician and NPP in the office-based settings that could not be billed as “incident to” services. For example, a physician and an NPP may both see a new patient in the office, each providing services to the patient. This service could not be billed as an “incident” to service because it is a visit for a new patient and “incident” to services may only be billed for established patients. Therefore, the participation of both the physician and NPP in providing the service to the patient would not be recognized. In academic medical centers, it is common for physicians and NPPs to rotate among multiple clinical settings, some of which are institutional settings (e.g. provider-based hospital) and others are office-based settings. For these physicians and NPPs, it would be very confusing if the rules related to billing and documentation for split (shared) visits differ depending on whether they are in a provider-based setting verses an office-based setting. Billing rules should not influence care provision.

***Tax ID Should Be Used to Define Same Group Along with Specialty***

CMS proposes that a physician and NPP must be in the same group in order for the physician and NPP to bill for a split (or shared) visit and seeks public comment on whether they should further define “group.” One option considered is whether the physician and NPP must be in the same clinical specialty. For this option CMS would adopt the CPT definition that the NPP is considered to be in the same specialty and subspecialty as the physician with whom they are working. Another approach would be to consider the physician and NPP to be in the same group if they meet the group definition of “physician organization.” A third approach would be to consider practitioners with the same billing tax identification number as being in the same group. **We recommend that the Tax ID be used as the basis to determine whether clinicians are part of the same group, and that the physician and NPP should be working as part of the team that provides the same clinical services.** For example, if an NPP is working with a group of orthopedic surgeons to treat the patient, the NPP should be considered part of the orthopedic surgery group when determining whether split (shared) visits can be provided.

***Prolonged E/M visits:***

CMS proposes to allow a practitioner to bill for a prolonged E/M visit as a split (or shared) visit. CMS proposes to permit the physician or NPP to bill for split (or shared) visits for both new and established patients, as well as for initial and subsequent visits. Practice of medicine has evolved towards a more team-based approach of care delivery and greater integration in the practice of physicians and NPs, particularly in the facility setting.

**Critical Care Services:**

CMS proposes that critical care may be furnished as concurrent (or concurrently) to the same patient on the same day by more than one practitioner in more than one specialty (e.g., an internist and a surgeon), regardless of group affiliation, if the service meets the definition of critical care and is not duplicative of other services. CMS seeks comments on when it would be appropriate for more than one physician or NPP of the same or different specialties, and within the same or a different group, to provide critical care services. We appreciate CMS’ interest in finding out more information on how critical care services are delivered. **Before making any significant changes to critical care payment policies, we urge CMS to investigate further**



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**and meet with stakeholders who provide these services to obtain more information about the delivery of these services.**

Critical care involves the physician's direct delivery of medical care for a critically ill or critically injured patient. It requires decision making of high complexity to assess, and support vital organ systems and/or to prevent further life-threatening deterioration of the patient's condition. Critically ill patients often require more than one physician or NPP of the same specialty or from different specialties to be involved in providing critical care services. Surgeons, intensivists, hospitalists, cardiologists, emergency medicine physicians, pediatricians, pulmonologists, anesthesiologists, and others may be involved in the patient's care.

A critically ill patient may have more than one medical condition requiring diverse specialized medical services provided by multiple practitioners from multiple specialties, each playing an active role in the patient's treatment. For example, a trauma surgeon might provide critical/life-saving or conserving care and another specialist, such as a pulmonologist, may need to provide critical care services to the patient also.

In addition, a patient may have several physicians from the same practice and specialty treating the same condition, such as cardiologists involved in his/her critical care. One cardiologist from the practice may perform a percutaneous coronary intervention to treat an acute myocardial failure and another cardiologist may then be needed to manage the patient's post-MI heart failure in an intensive care unit. Critical care is a team-based approach. It is important that CMS does not create policies that would create financial incentives for team members to compete rather than collaborate CMS should take more time before finalizing its proposals described below related to critical care to better understand the delivery of these services.

***CMS Should Allow Payment for Critical Care Visits and Same-Day Emergency Department, Inpatient or Office Outpatient Visits***

The CPT codebook states that critical care and other E/M services may be provided to the same patient on the same date by the same individual. Due to concerns with duplicative payment, CMS proposes that no other E/M visit can be billed for the same patient on the same day as critical services when the services are furnished by the same practitioners, or by practitioners in the same specialty in the same group. CMS seeks comments on this proposal to better understand clinical practice for clinical care.

We oppose this proposal and urge CMS to continue to allow payment for E/M visits and critical care services for the same patient on the same day by practitioners in the same specialty. A patient may be stable and not require critical care when seen earlier in the day by the physician yet deteriorate clinically that same day and require critical care services. As long as the physician documents that the E/M service was provided prior to the critical care service at a time when the patient did not require critical care, that the service is medically necessary, and the service is separate and distinct (non-duplicative) from the critical care service provided later in the day, we believe it is appropriate to allow billing for the service. This has been the longstanding Medicare policy.

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### ***CMS Should Not Bundle Critical Care Visits with Global Surgery***

Because critical care visits are included in some 10 and 90-day global packages, CMS proposes to bundle critical care visits with procedure codes that have a global surgical period. **We strongly urge CMS not to bundle critical care services into the global package.** In academic medical centers, it is typical for the surgical team to perform surgery and then other physicians who are not part of the surgical team (such as critical care/ intensivists) to care for the patient in the ICU after the surgery. The intensivist/critical physicians manage the patient whose condition can change rapidly. They need to be proactive and continually monitor and modify the care to ensure good outcomes. Caring for these patients requires a team approach. If the critical care services are bundled into the surgery global package, they would become dependent on the surgeon sharing a portion of compensation. This situation would undermine the critical care physician services that have grown over the years to significantly improve recovery after surgery.

In addition, there are circumstances where critical care services are unrelated to the surgery or typically not seen in relation to the operation for which payment for critical care services should be allowed. An example would be a patient who has had a joint replacement and subsequently has heart failure. Global packages do not include critical care services provided unrelated to the surgery in the value computations. Moreover, patients receiving critical care postoperatively unrelated to surgery generally have longer lengths of stay. Modifiers and diagnosis codes could be used to identify a significantly separate, identifiable service from the surgical procedure that is different from the usual pre- and post-operative care associated with the procedure.

### **PAYMENT FOR SERVICES OF TEACHING PHYSICIAN**

#### **General Policy for E/M Visits**

Prior to the public health emergency, Medicare policy required that if a resident participates in a service furnished in a teaching setting, a teaching physician can bill for the service only if they are physically present for the key or critical portion of the service. During the PHE, CMS has allowed virtual supervision (using audio/video real time communications technology) of residents during the key or critical portion of the visit. After the PHE ends, virtual supervision of residents will be allowed only in residential training sites that are located outside a metropolitan statistical area. In the case of E/M services, the teaching physician must be present during the portion of the service that determines the level of service billed. For the primary care exception (under section 415.174 c) CMS adopted a policy during the PHE that allows the teaching physician to direct the care furnished by the resident, and to review the services furnished by the resident during or immediately after the visit, remotely using audio/video real-time communications technology.

We commend CMS for adopting these virtual supervision policies as they have been critical in reducing exposure to COVID-19 for physicians and enabling expanded access to health care services. Continuing these policies will reduce risk exposure to all infectious diseases (e.g., coronavirus and seasonal flu), increase the workforce capacity of teaching institutions, increase access to care for patients, and allow important experience and training for the future physician workforce under appropriate supervision. **We recommend that CMS continue to allow these virtual supervision policies for residents on a permanent basis in all geographic regions rather than limiting virtual supervision to only rural sites. If CMS chooses not to extend its**

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**policy to all geographic regions, at a minimum virtual supervision should be allowed in medically underserved areas.**

We believe that the teaching physician is able to exercise full, personal control over the management of the key portion of the care to bill Medicare Part B when the services are furnished by the resident with the teaching physician present through audio/video real time communications technology. The teaching physician should have the discretion to determine whether it is appropriate to be present virtually rather than in person depending on the services being furnished and the experience of the particular residents involved.

We believe that guardrails exist through the Accreditation Council for Graduate Medical Education (ACGME) and other accrediting organizations that have standards and systems that will ensure patient safety and oversight of residents when virtual supervision of residents occurs. ACGME sets forth extensive program requirements, including requirements related to supervision. ACGME recognizes that supervision may be exercised through a variety of methods, as appropriate to the situation, including through telecommunication technology. The program must demonstrate that the appropriate level of supervision is in place for all residents and is based on each resident's level of training and ability guided by milestones, as well as patient complexity and acuity. The faculty must assess the knowledge and skills of each resident and delegate to the resident the appropriate level of patient care authority and responsibility, and each resident must also know the limits of their scope of authority. Teaching physicians are ultimately responsible for determining the level of supervision required and any adverse events that occur. ACGME, other accrediting organizations, and the medical education community work hard to monitor, report, and address any issues related to workload, patient safety, medical error, resident well-being and burn-out, professionalism, and resident learning and outcomes.<sup>1</sup>

This change to CMS policy will improve patient access to care while also enhancing the resident's skills. As discussed above, ACGME supports the use of audio-visual communication devices by residents and their physicians. We believe that as long as the virtual presence of the teaching physician complies with the standards of ACGME and other accrediting organizations, teaching physicians, residents, and their patients will benefit from the provision of telehealth by residents.

The AAMC supports the exclusion from direct supervision by interactive telecommunications technology of surgical, high risk, interventional and other complex procedures, endoscopies, and anesthesia services. For these services, we believe that the requirement for the physical presence of the teaching physician for the entire procedure or the key portion of the service with immediate availability throughout the procedure, is necessary for patient safety given the risks associated with these services. When providing these types of services, a patient's clinical status can quickly change and there is a need for the rapid onsite decision-making of the supervising physician.

**We support CMS' proposal in the rule that when total time is used to determine the office/outpatient E/M visit level, only the time that the teaching physician was present should be included.** This is consistent with the policy that PFS payment is made when a teaching physician involves a resident in providing the care only if the teaching physician is

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<sup>1</sup> See [ACGME program requirements](#) (common program requirements residency)



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present for the key or critical portion of this visit, including the portion used to select the visit level. **In addition, we support CMS' proposal that under the primary care exception, only medical decision making (not time) can be used to select the office/outpatient E/M visit level.** We agree that medical decision making would be a more accurate indicator of the complexity of the visit than time.

#### VACCINE ADMINISTRATION SERVICES

##### *The AAMC supports CMS' decision to cover COVID-19 Vaccinations and COVID-19 Monoclonal Antibodies Treatment*

The AAMC commends CMS for adding the COVID-19 vaccine and its administration to the list of preventive vaccines including the influenza, pneumococcal, and HBV vaccines covered under Part B. There is no applicable beneficiary coinsurance, and the annual Part B deductible does not apply for these vaccinations or the services to administer them. We applaud AAMC for increasing the payment rate for administering a COVID-19 vaccine to \$40 per dose from \$28.39 for COVID-19 vaccines that require one dose and \$40 to administer the first and second dose in a two-dose regime (\$80 total) from \$16.94 and \$28.39 respectively.

The AAMC supports CMS establishing a new add-on payment with a national rate of \$35.50 that allows the administration of the COVID-19 vaccine in the beneficiary's home. Under this new policy, providers and suppliers that administer a COVID-19 vaccine in a beneficiary's home can receive payment from Medicare for one of the existing COVID-19 vaccine administration CPT codes. Providers and suppliers administering a COVID-19 vaccine in the home will be paid a national average of \$75.50 dollars per dose (\$40 for COVID-19 vaccine administration and \$35.50 for the additional payment for administration in the home). This policy requires the patient to have difficulty leaving the house or the patient must be hard-to-reach because they have a disability or face clinical, socioeconomic, or geographical barriers to getting a COVID-19 vaccine in settings other than their home. We believe the option for home vaccination will greatly improve access to the vaccine. Increasing the vaccination rate is crucial as we attempt prevent the spread of COVID-19 and end the PHE.

Furthermore, we support CMS' decision to cover COVID-19 Monoclonal Antibodies treatment. There are currently several approved treatments for COVID-19 in the hospitals setting; however, there are limited treatments for those with COVID-19 symptoms who are not being treated in the hospital. Early data suggest those with severe COVID-19 symptoms benefit from early administration of the Monoclonal Antibodies treatment<sup>2</sup>. This treatment can be administered outside the hospital setting. And it is especially important for those who have not been vaccinated and are therefore at greater risk of contracting severe COVID-19.

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<sup>2</sup> See Chitsike, L., Duerksen-Hughes, P. [Keep out! SARS-CoV-2 Entry Inhibitors: Their Role and Utility as COVID-19 Therapeutics](#). *Viral J* **18**, 154 (2021); see also Weinreich DM, et al., REGN-COV2, a Neutralizing Antibody Cocktail, in Outpatients with Covid-19. *N Engl J Med*. 2021;384:238–51 (January 21, 2021).

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## **APPROPRIATE USE CRITERIA**

### ***AAMC Supports Delay in the Appropriate Use Criteria Program***

**We support CMS’ proposal to delay enforcement of the Appropriate Use Criteria (AUC) program by at least one year until the later of January 1, 2023, or the January 1 that follows the end of the public health emergency.** The AUC program requires ordering physicians to consult appropriate use criteria using a clinical decision support mechanism prior to ordering advanced imaging services for Medicare beneficiaries and furnishing physicians to report this information on the claim. Currently, CMS is scheduled to begin denying claims that do not report AUC information on January 1, 2022. The COVID-19 pandemic has caused significant disruptions to physician practices and this delay will allow more time for the education and operations testing period. This extra time is critical given CMS’ finding that only 9-10 percent of 2020 diagnostic imaging claims would have met the AUC reporting requirements to be paid if enforcement had been in effect. This low compliance rate is due in part to lack of knowledge of the changes and complexity of reporting and billing requirements

CMS also seeks comment on several claims processing proposals meant to address scenarios that have been identified as challenging or impractical for AUC compliance and areas that need more education and outreach. We urge CMS to ensure that there is a simplified tracking and reporting system. The claims processing proposals involves a complex system of tracking consultation of AUCs, G-codes and modifiers that must be included on the claim form in order for the furnishing provider to be paid. It can be difficult for the furnishing professional to supply the ordering physician’s AUC-use information to CMS. In many cases, the ordering physician and furnishing professional will not share the same office space or EHR system. To share this information will require additional health IT interoperability between the ordering physician’s EHR and the systems used by the furnishing physicians in their practices.

**CMS should not finalize its proposal to retire or redefine Modifier MH, which is used to identify claims for which AUC consultation information was not provided to the furnishing professional and furnishing facility.** Without this modifier, imaging services would most likely be delayed until the furnishing provider is able to get in touch with the ordering provider. These delays would negatively impact Medicare patients. **Furthermore, we do not support CMS’ proposal to redefine the Modifier MH so that it is used in scenarios where an “AUC consultation is not required.”** Instead, CMS should create a new modifier to describe those situations.

**The AAMC supports CMS’ proposal to allow the furnishing professional to update or modify an imaging order in certain circumstances when the beneficiary is under their care.**

We agree with CMS’ proposal that in these circumstances the ordering professional and the furnishing professional should not be required to consult the AUC for additional services. However, we find the claims submission process proposed by CMS for these updated orders to be confusing. We recommend that CMS develop other solutions for how AUC data should be reported on claims for revised/additional imaging orders.

CMS is considering whether claims that do not pass the AUC claims processing edits, and therefore will not be paid, should be initially returned to the provider to be corrected and resubmitted or should be denied so they can be appealed. **We recommend that CMS initially**

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**return claims for correction and resubmission and revisit in the future whether this approach needs to be revised.** This approach gives providers time to better understand AUC claims processing and provides the agency with data to better understand potential areas where provider education is needed.

CMS requests feedback on whether there are additional scenarios not identified in this rule that are potentially challenging or impracticable for application of the AUC program. **The AAMC has concerns about the application of the AUC program to clinical trials.** Advanced diagnostic imaging services may be ordered because a patient is participating in a clinical trial and the advanced diagnostic imaging service is part of the clinical trial protocol - either as the investigational item/service itself or ordered to monitor for complications related to the investigational item or service. When advanced diagnostic imaging services are ordered/performed as part of a clinical trial protocol, it is possible that the order for the imaging service will not adhere to the AUC in the qualified clinical decision support mechanism consulted by the ordering professional, resulting in placement of the MF modifier on the claim(s). Therefore, applying AUC to clinical trials has the potential to inappropriately identify physicians who are participating/conducting clinical trials as outliers. Not only could this result in the physician being subject to prior authorization in the future, it could potentially discourage physicians/providers from participating in clinical trials that include Medicare beneficiaries. The intent of AUC is to ensure appropriate use of advanced diagnostic imaging services provided to Medicare beneficiaries. However, the AUC requirements should not apply to advanced diagnostic imaging tests that are part of clinical trials as there are long-standing CMS policies related to approval and coverage of clinical trial items/services that are protective of Medicare beneficiaries. Additionally, human research / clinical trials are highly regulated by multiple other agencies, including FDA and NIH. **We strongly recommend that CMS exclude advanced diagnostic imaging services that are performed as part of a clinical trial from the AUC program and establish a separate HCPCS modifier that will be used to identify the claims for these tests.**

#### **MEDICARE TELEHEALTH AND COMMUNICATION TECHNOLOGY-BASED SERVICES**

***All Services Added to the Medicare Telehealth Services List on a Category 3 Basis Should be Retained Until at Least the End of 2023***

CMS' authority to add services to the telehealth list based on their similarity to other services already on the telehealth list (Category 1) or based on an assessment of whether the services would provide clinical benefit to the patient if provided by telehealth (Category 2) is not dependent on the declaration of a public health emergency. In 2021 CMS finalized a new Category 3 group of services which would be included on the Medicare telehealth list until the end of the calendar year in which the PHE ends to allow more time to study the benefit of providing these services outside the context of the pandemic. This new Category 3 provided a basis for adding or deleting services from the Medicare telehealth list on a temporary basis where there is likely clinical benefit, but where there is not yet sufficient evidence available to permanently consider the services under Category 1 or 2 criteria. The AAMC strongly supported the establishment of Category 3 and the services that CMS included on the Category 3 list. CMS is proposing to extend the duration of the services included on the Category 3 list until the end of CY 2023. **We strongly support retaining these services on the Category 3 list of services**



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**until the end of 2023 as an option to temporarily allow services to be billable, while the benefits are studied. We also recommend CMS consider implementing the concept of Category 3 as a permanent option.** This would allow potential codes time to be considered a telehealth service and CMS would be able to obtain sufficient evidence demonstrating the benefit of providing the service by telehealth.

***Mental Health Services Furnished via Telehealth Should be Permitted Without Restrictions by Geographic Location, In-person Visit or Audio-only Limitations***

**AAMC strongly supports coverage and payment of telehealth for mental health services.** In this proposed rule CMS is implementing provisions in the Consolidated Appropriations Act, 2021 (CAA) that remove geographic restrictions and permit the home to be an originating site for telehealth services for the treatment of mental health disorders, as long as the practitioner has seen the patient in person within the last 6-months. During the PHE, the removal of Medicare's geographic and site of service limitations for services furnished via telehealth significantly increased access to care, particularly for behavioral telehealth services. In April 2020, at the height of the PHE, telehealth visits for psychiatry and psychology surpassed fifty percent of the total services. According to data from faculty practices included in the Clinical Practice Solutions Center (CPSC)<sup>3</sup>, the use of telehealth for mental health services remained high throughout 2020 and 2021, at roughly fifty percent. In addition, there has also been a reduction in missed appointments for behavioral health services because telehealth expansion has made it easier for patients to access care. This is particularly important in mental health because there is a shortage of providers.

CMS proposes to require that an in-person, non-telehealth service be furnished by the physician or practitioner at least once within 6-months before each telehealth service for mental health disorders. CMS seeks comment on whether the 6-month interval is appropriate and whether the required in-person non-telehealth service could also be furnished by another physician or practitioner in the same specialty or subspecialty and within the same group as the practitioner who furnishes the telehealth visit to furnish the in-person visit.

**The AAMC believes mental health services furnished via telehealth should be permitted without requiring an in-person visit.** While we recognize that the statute requires an initial in-person visit prior to the telehealth visit, we believe that an in-person requirement would act as a significant barrier to care for those who rely on mental health services. This barrier will disproportionately affect those in more vulnerable populations who, because of their job, lack of others to help care for their dependents, transportation issues and other limitations, are not able to attend an in-person visit. Continuation of care is crucial for mental health services, and in-person visit requirement may result in a lapse of care and ultimately negative clinical outcomes for patients. If finalized, mental health services would be the only type of service provided by telehealth which would require an in-person visit at a specific interval, which is arbitrary and discriminatory against this particular type of service.

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<sup>3</sup> The Clinical Practice Solutions Center (CPSC), developed by the Association of American Medical Colleges (AAMC) and Vizient, is the result of a partnership that works with member practice plans to collect data on provider practice patterns and performance.

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**The statute gives CMS flexibility related to subsequent in-person visit requirements, and therefore we recommend CMS not require an in-person visit every 6-months.** Physicians are responsible for the quality of care delivered to their patients. As such, physicians should be responsible for determining when, if at all, it is appropriate for the patient to have an in-person visit. While we oppose the in-person requirement, if CMS does decide to institute an in-person requirement, the interval should be longer than 6-months to ensure access to care and lessen the burden on patients and providers. The establishment of a 6-month in-person requirement does not seem to be medically driven and is instead being offered as a billing requirement which conflicts with CMS' patient first objectives. If a patient has received appropriate, medically necessary behavioral health services and they wish to continue receiving care virtually they should be able to do so. Furthermore, the 6-month requirement adds the additional burden of commuting to see the provider every six months. This burden will disproportionately affect those in underserved or rural areas and anyone who does not have reliable transportation.

**CMS should permit another practitioner in the same specialty or subspecialty within the same group as the practitioner who furnishes the in-person visit to provide the telehealth visit.** This policy should not be limited to instances where the provider of the telehealth service is unavailable or in the case of two professionals who are practicing as a team.

Even before the COVID-19 PHE there was a shortage of mental health providers as noted as we looked for solutions to the opioid crisis. The PHE has led to a drastic increase in people seeking treatment for their mental health which has led to an even greater shortage of providers. Both new and existing patients are experiencing extremely long wait times for appointments. Requiring the same provider who performs the telehealth visit to provide the in-person visit will only further exacerbate the problems with access. Furthermore, because COVID-19 PHE waivers removed geographic restrictions, many patients sought treatment from providers located outside their communities. As a result, they may not have the ability to commute the distance required to see their same provider in-person. Academic medical centers may have providers within the practice that are at a location closer to the patient's home, making the commute to their required in-person visit less difficult. If these practitioners are in the same specialty or subspecialty and within the same group as the practitioner providing telehealth, they should be permitted to see the patient for the in-person visit.

**The AAMC strongly supports the use of audio only communication to provide mental health services.** During the PHE, coverage and payment for audio-only calls has been critical to ensure access to care for some patients. Physicians have been able to provide a wide array of services efficiently, effectively, and safely to patients using the telephone

CMS did not specifically include substance abuse services (SUD) in its definition of "mental health services" that could be provided using audio-only technology. We recommend CMS explicitly state in the final rule that "SUD" services are considered "mental health services" that could include audio-only services under the revised definition of "interactive telecommunications system" under 42 C.F.R. § 410.78(a)(3).

**The AAMC believes mental health services should be furnished via telehealth without limiting audio-only communication technology to instances where the beneficiary is unable to use, does not wish to use, or does not have access to two-way, audio/video technology.** Coverage of these audio only services is particularly important for Medicare beneficiaries who

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may not have access to, or may not feel comfortable with, interactive audio/video technologies. Initial reports suggest that lack of audio-only services particularly affects vulnerable populations, including the elderly, those with low socioeconomic status, and certain races and ethnicities.

Providers have found that when treating certain mental health conditions, such as post-traumatic stress disorder, patients often benefit from obtaining services without visual contact with their provider. Audio-only technology allows patients to communicate with providers while maintaining a sense of privacy. **Physicians and other health care professionals are responsible for the quality of care delivered to their patients. As such, they should be responsible for determining when audio-only technology is appropriate.** To effectively treat a patient a physician needs the discretion to make clinical decisions based on the needs of the patient. Limiting audio-only technology to instances where the beneficiary is unable to use, does not wish to use, or does not have access to two-way, audio/video technology will ultimately prevent patients from receiving the care that they need.

**The AAMC believes services provided by audio-only technology should not preclude higher-level mental health services, for example, level 4 and level 5 E/M.** The AAMC believes physicians should be responsible for the quality of care delivered to their patients. Providers should be permitted to furnish higher-level services via audio-only technology if they believe it is clinically appropriate to do so.

**The AAMC supports creating a service-level modifier that would identify mental health telehealth services permitted under the CAA and those that are not and a separate modifier to identify mental health telehealth services furnished to a beneficiary in their home using audio-only communications technology.** These modifiers would allow the collection of claims-based data and lead to the analysis of the use of telehealth and audio-only services. This information can then be used to determine the ways in which mental health services are being provided, improve clinical outcomes, and benefit patients.

CMS proposes requiring additional documentation in the patient's medical record to support the clinical appropriateness of audio-only technology. **The AAMC believes that documentation requirements for audio-only visits should be consistent with requirements for in-person visits to support the service.** We support CMS' proposal to establish a modifier for "audio-only technology" and we believe that reporting that modifier is sufficient. However, if CMS decides to require additional documentation for audio only, we recommend allowing physicians to document one of the following three reasons that the visit is audio-only.

1. 'Audio-only; patient unable to use two-way audio-visual technology'
2. 'Audio-only; patient does not wish to use two-way audio-visual technology'
3. 'Audio-only; patient does not have access to two-way audio-visual technology'

***The AAMC Strongly Supports Permitting Rural Health Clinics (RHCs) and Federally Qualified Health Centers (FQHCs) to Furnish Telehealth Services for Mental Health***

During the PHE, the CARES Act established Medicare payment for telehealth services when RHCs and FQHCs serve as the distant site during the COVID-19 PHE. RHCs and FQHCs were able to effectively furnish mental health services and treat patients via telehealth during the PHE and should be allowed to continue to do so after the PHE ends. For the same reasons mentioned above, we do not support limiting audio-only mental health visits provided by RHCs and FQHCs



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to cases where beneficiaries are not capable of, or do not consent to, the use of devices that permit a two-way, audio/video interaction.

In summary, **we acknowledge the statutory requirement for one in-person meeting within the 6-months prior to the telehealth visit but strongly support permitting telehealth for mental health services without requiring an in-person visit. If CMS does institute an in-person requirement we believe the interval should be longer than 6 months to lessen the burden on patients and providers.** And CMS should permit another practitioner in the same specialty or subspecialty and within the same group as the practitioner who furnishes the telehealth visit to furnish the in-person visit. This should not be limited to instances where the provider of the telehealth service is unavailable or in the case of two professionals who are practicing as a team. **The AAMC believes that documentation requirements for audio-only visits should be consistent with requirements for in-person visits to support the service.** We also believe telehealth services provided by audio-only should not preclude higher-level services, for example, level 4 and level 5 E/M. The AAMC supports creating a service-level modifier that would identify mental health telehealth services permitted under the CAA and those that are not and to identify mental health telehealth services furnished to a beneficiary in their home using audio-only communications technology.

**The AAMC strongly supports establishing a rural emergency hospital as a telehealth originating site starting 2023.** CMS interim final rules related to the PHE waived patient location restrictions that applied to telehealth services. Under this change, CMS pays for telehealth services furnished by physicians and other health care providers to patients located in any geographic location and at any site, including the patient's home, during the PHE. At the end of the PHE, the geographic restriction will resume for most telehealth services. As a result, patients in rural areas will have to travel to an originating site to receive telehealth services. Establishing additional originating site locations in rural emergency hospitals will make it easier for patients in rural communities to receive care through telehealth services.

***CMS Should Continue to Allow Direct Supervision through Virtual Supervision on a Permanent Basis***

During the COVID-19 PHE, CMS adopted a policy on an interim basis that direct supervision for services billed "incident to" a physician service could be met through virtual supervision. Direct supervision generally requires immediate availability within the office suite. We commend CMS for adopting these virtual supervision policies as they have been critical in reducing exposure to COVID-19 and enabling expanded access to health care services. Continuing these policies once the PHE ends will reduce risk exposure to all infectious diseases (e.g., coronavirus, seasonal flu, and others), and increase access to care for patients.

***CMS Should Permanently Finalize HCPCS code G2252 for Virtual Check-In Visits***

**While the AAMC supports the establishment of HCPCS code G2252 for virtual check-in visits for longer units of time, we strongly urge CMS to continue to allow separate payment for the telephone E/M codes (99441-99443) after the public health emergency ends.** In the CY 2021 PFS final rule CMS established HCPCS code G2252 (Brief communication technology-based service, for 11–20 minutes of medical discussion) on an interim basis. This code was meant to address the widespread concerns that payment for audio-only E/M visits

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would not continue after the conclusion of the PHE. Although this code allows for payment for a longer virtual check-in necessary to determine whether an in-person visit is needed, it does not take the place of a telephone E/M visit. Eliminating coverage for telephone E/M services will result in inequities in access to services for specific populations. AAMC believes that CMS should permanently finalize HCPCS code G2252 and continue payments for E/M telephone visits. Please see below for additional comments on audio-only E/M codes.

***AAMC Commends CMS for Establishing Five New Remote Therapeutic Monitoring (RTM) Codes***

These codes monitor health conditions, including musculoskeletal system status, respiratory system status, therapy (medication) adherence, and therapy (medication) response, and as such, allow non-physiologic data to be collected. We strongly support CMS' decision to allow data to be self-reported as well as digitally uploaded. This will allow physicians to collect additional information such as pain, appetite, and other subjective metrics which could be beneficial when managing the patient's care. We also recommend that CMS allow practitioners, such as physical therapists and nurses, to bill the RTM codes. We further recommend CMS remove the specialty and condition-specific limitations in the code definitions which create unnecessary barriers. Qualified practitioners, such as physical therapists, should be able to bill the RTM codes.

We appreciate and commend the work CMS is doing to expand telehealth for mental health and virtual supervision, virtual check-in, and RTM codes. We believe this expansion will greatly benefit patients, especially those struggling with mental health issues in the aftermath of the PHE. However, it is imperative that the progress continue in telehealth. We urge Congress and CMS to make changes to legislation and regulations that will allow the remaining COVID-19 PHE telehealth waivers to be made permanent while ensuring that reimbursement remains at a level that will support the infrastructure needed to continue to provide telehealth services at a level far above that of the pre-pandemic world. Please see below for comments pertaining to the Covid-19 telehealth and communications technology-based services waivers.

***CMS Should Waive Patient Location Restrictions and Rural Site Requirements***

The AAMC strongly supports changes made in the CMS interim final rules related to the PHE that waived patient location restrictions that applied to telehealth services. Under this change, during the PHE CMS pays for telehealth services furnished by physicians and other health care providers to patients located in any geographic location and at any site, including the patient's home. This has allowed patients to remain in their home, reducing their exposure to COVID-19 and reducing the risk that they expose another patient or their physician to COVID-19. It also means that patients who find travel to an in-person appointment challenging can receive care which may be particularly important to patients with chronic conditions or disabilities who need regular monitoring. It also helps those in more vulnerable populations who because of their job, lack of care for dependents, transportation issues, and other limitations, find it difficult to attend an in-person visit to receive care. The AAMC acknowledges that CMS does not have the authority outside of the PHE to make the changes related to geographic locations and originating sites permanent. **However, we encourage CMS to work with Congress to waive the geographic site requirements and allow the home to be an originating site.**

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***Providers Should be Paid the Same Amount for Telehealth Services as Services Delivered In-Person***

CMS does not address payment rates for Medicare telehealth services in this proposed rule. **The AAMC strongly recommends that providers be paid the same for furnishing telehealth services as services delivered in person.** Medical care and the complexity of medical decision making often does not change in situations where telehealth is appropriate and thus the provider should be compensated similarly. In discussions with faculty practice plan leaders, the AAMC has heard from members that there are significant infrastructure costs to fully integrate their electronic health record systems with HIPAA-compliant telehealth programs. Physicians employ medical assistants, nurses, and other staff to engage patients to coordinate care, regardless of whether the services are furnished in person or via telehealth. We commend CMS for acknowledging these expenses in the first COVID-19-related interim final rule (March 31, 2020 IFC)<sup>4</sup> by stating that telehealth services would be reimbursed to physicians at the non-facility fee schedule rate.

We recommend CMS provide a facility fee under the outpatient prospective payment system (OPPS) for telehealth services provided by physicians that otherwise would have been provided in the provider-based entity. Similar to the physician office-based setting, the provider-based entity will continue to employ nurses, medical assistants, and other staff to engage patients during telehealth visits or to coordinate pre-or-post visit care. The provider-based entity incurs these costs associated with providing the telehealth service and should be reimbursed as if the services were provided in person. We were pleased that in the second interim final rule (May 8, 2020 IFC)<sup>5</sup> CMS decided to pay an originating site fee to recognize the costs incurred by hospitals.

***CMS Should Continue to Allow Payment for Telehealth Services Delivered Across State Lines***

As part of the COVID-19 PHE response, CMS has allowed providers to be reimbursed by Medicare for telehealth services across state lines with permission from the individuals states. This waiver creates an opportunity to improve patient access to services and to help improve continuity of care for patients that have relocated or who have traveled to receive their surgery or other services from a specialist in another state. While CMS has the authority to allow for payment, states need to act to allow practice across state lines to occur. **We urge CMS to continue this flexibility with regard to payment for services and to study opportunities for national medical licensing. Until this is available, we encourage CMS to work with states to participate in interstate medical licensure compacts or other mechanisms that would allow care delivery across state lines in the future after the pandemic ends.** In addition, we urge CMS to support the Temporary Reciprocity to Ensure Access to Treatment (TREAT) Act (S. 4421, HR. 8283), which would provide temporary licensing reciprocity for health care professionals in all states for all types of services during the COVID-19 pandemic.

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<sup>4</sup> 85 Fed. Reg. 19320 (March 31, 2020)

<sup>5</sup> 85 Fed. Reg. 27550 (May 8, 2020)



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***Residents Should be Allowed to Provide Medicare Telehealth Services While the Teaching Physician is Present Virtually without geographic restriction***

CMS has finalized policy that allows teaching physicians to bill for telehealth services when a resident located in a rural training site furnishes services to a beneficiary who is in a separate location within the same rural area as the residency training site. A resident located in rural training site may also furnish telehealth services to a beneficiary who is located in a different rural location. In these cases, the teaching physician is present, through interactive, audio/video real-time communications technology, in a third location, either within the same rural training site as the resident or outside of that rural training site. When a resident furnishes Medicare telehealth services in a rural residency training site and the teaching physician is present using interactive, audio/video real-time communications technology, the patient's medical record must clearly reflect how and when the teaching physician was present during the key portion of the service.

The AAMC believes that residents should be allowed to provide Medicare telehealth services while teaching physician is present through interactive technology. Enabling virtual supervision of a resident during telehealth services is crucial to expanding patients' access to appropriately supervised care while enhancing the resident's skills. As part of this development, it is essential for residents to have experience with telehealth visits while supervised to prepare them to provide telehealth services once they complete their training. **Due to the nature of interactive, audio/video real-time communications technology, the AAMC believes that it is not appropriate to limit virtual supervision based on geographic location.** We recommend that CMS allow residents to provide telehealth services permanently while a teaching physician is present via real-time audio-visual communications technology without geographic restriction. If CMS does not extend this policy in all geographic locations, at a minimum, it should be expanded to include medically underserved areas.

***AAMC Strongly Supports Continued Payment for all Audio-only/Telephone-only Evaluation & Management Codes***

The AAMC commends CMS for allowing payment for audio-only technology for mental health services. We strongly believe that payment should be extended to Audio-only/Telephone-only E/M Codes. In the March 31st COVID-19 IFC, CMS established separate payment for audio-only E/M services, CPT codes 99441-99443. CMS initially finalized payment based on the RVUs recommended by the RUC. Based on stakeholders' feedback, in the 2nd COVID-19 IFC,<sup>6</sup> CMS established new RVUs for the audio-only E/M services based on crosswalks to the most analogous office/outpatient E/M codes. In addition, CMS recognized these services as telehealth services and added them to the Medicare telehealth list for the duration of the PHE. For audio-only E/M services, CMS issued a waiver of the requirements under section 1834(m) of the Act and its regulation at § 410.78 that Medicare telehealth services must be furnished using video technology. CMS is proposing that it will not recognize these codes for payment under the PFS after the PHE. However, CMS acknowledges that the need for audio-only interaction could remain after the PHE as beneficiaries continue to avoid sources of potential infection.

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<sup>6</sup> Ibid.

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The AAMC strongly supports payment for the audio-only E/M codes after the PHE ends. Eliminating coverage for these important audio-only services will result in inequities in access to services for specific populations. Coverage of these audio only services is particularly important for Medicare beneficiaries who may not have access to, or may not feel comfortable with, interactive audio/video technologies. Initial reports suggest that lack of video services or discomfort regarding the use of video may particularly affect vulnerable populations, including the elderly, those with low socioeconomic status, and certain races and ethnicities.

Data from the Clinical Practice Solutions Center (CPSC),<sup>7</sup> which contains claims data from 90 physician faculty practices, shows that approximately 30% of telehealth services were provided using audio-only telephone technology in April and May 2020. The proportion of telephone/audio-only visits increased with the age of the patient, with 17% of visits delivered via audio-only interaction for patients 41-60 years of age, 30% for patients 61-80 years of age, and 47% of visits for patients over 81. CMS also released data showing that nearly one third of Medicare beneficiaries received telehealth by audio only telephone technology.<sup>8, 9</sup> This demonstrates the importance of continuing to allow equitable coverage and payment for telephone services to Medicare beneficiaries.

In addition, patients in rural areas and those with lower socio-economic status are more likely to have limited broadband access, making it more difficult to receive telehealth services by audio and video interactions. For these patients, their only option to receive services remotely is through a phone. Many services can be clinically appropriate when provided via an audio-only interaction, and that option should exist for patients.

## **PULMONARY REHABILITATION PROGRAM**

### ***CMS Should Expand the Pulmonary Rehabilitation (PR) Program***

In the 2022 PFS, CMS proposes to expand the PR program to include more covered conditions. Currently PR is a physician-supervised program for patients with COPD and certain other chronic respiratory diseases. CMS proposes to cover PR for Medicare beneficiaries who have been diagnosed with severe manifestations of COVID-19, defined as requiring hospitalization in the ICU or otherwise, and who experience continuing symptomatology, including respiratory dysfunction, for at least four weeks post discharge. **The AAMC is glad that CMS recognizes the pulmonary issues associated with severe COVID-19. We suggest consulting with pulmonary specialists to determine the most effective way to incorporate severe COVID-19 into the PR program.**

## **VALUING INNOVATIVE TECHNOLOGY**

CMS solicits comments on how to better understand resource costs for services involving innovative technologies, including but not limited to software algorithms and artificial

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<sup>7</sup> The Clinical Practice Solutions Center (CPSC), developed by the Association of American Medical Colleges (AAMC) and Vizient, is the result of a partnership that works with member practice plans to collect data on provider practice patterns and performance. This analysis included data from 65 faculty practices.

<sup>8</sup> HHS ASPE Issue Brief: [Medicare beneficiary use of telehealth visits: Early Data from the Start of the COVID-19 Pandemic](#) (July 27, 2020).

<sup>9</sup> Seema Verma, [Health Affairs Blog: Early Impact Of CMS Expansion Of Medicare Telehealth During COVID-19](#). (July 15, 2020)

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intelligence (AI). The AAMC supports physician use of evolving innovative technology to supplement the delivery of high-quality care. We urge CMS to consider payment policies for such technology that encourage their use while avoiding inadvertent disincentives.

### *Time and Effort*

At this stage innovative software algorithms and AI are used as an aid for physicians in the care of their patients. Innovative technologies supplement but do not replace a physician's judgment and medical decision-making, intensity of work, or responsibility associated with patient care.

**The AAMC urges CMS to rely on the knowledge and expertise of clinicians, who provide a given service with the use of innovative technology to best understand the impacts on physician time and effort, as it will be specific to each service and technology.**

### *Cost*

Cost is unlikely to be reduced substantially over time after a physician's initial upfront investment to acquire innovative technology. In the case of software in particular, developers often build on-going revenue streams through licensing and servicing fees. **CMS should consider additional ongoing costs when valuing innovative technologies to ensure that physicians are not disincentivized from the use of promising care innovations due to reimbursement that only supports initial costs.**

### *Bias*

Bias is a real concern, and one that is best addressed in the research and development phase of a given software algorithm or AI-based technology. The AAMC recently submitted comments<sup>10</sup> to a White House Office of Science and Technology Policy (OTSP) and National Science Foundation (NSF) request for information on an implementation plan for a national AI research resource. We noted that there are formidable barriers to the implementation of an inclusive AI research infrastructure due to the long-standing and systemic discrimination, biases, and inequities that exist in the U.S. – all of which are present in the many overlapping sectors that converge upon the field of AI. Data demonstrate that the U.S. clinical and research enterprise is likewise marbled with biases and inequities, which can potentially preclude the formation of an equitable AI framework that, when operationalized, benefits all communities.

Specific to innovation technological solutions for clinical practice, the background coding is typically a “black box,” and end users cannot identify -the human biases that are baked in. In the case of medical innovative technologies, clinicians must be trained on the use of the tool, including how to interpret its outputs, and to understand potential areas of bias when incorporating the tool into clinical practice. We urge CMS to consider collaboration with external stakeholders and other federal policymakers that might be better suited to evaluate potential bias in technology, such as the OSTP, NSF, National Institutes of Health, and the Food and Drug Administration, to best understand how the agency could incorporate bias review into health care payment considerations. As demonstrated by the OTSP and NSF RFI, this is a new area of focus, and CMS should proceed cautiously.

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<sup>10</sup> See [AAMC Submits Comments to OSTP and NSF on an Implementation Plan for a National Artificial Intelligence Resource](#) (August 31, 2021).



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### ***Improving Medicare Beneficiary Access to Care***

Incorporating innovative technology into practice holds the potential for improving patient access to care, and reducing inequities in access, especially with tools that improve population health analysis and tools that are able to appropriately pre-screen patients. As an example of the latter, there has been some evidence<sup>11</sup> of successful use of AI to initially assess images of a patient's skin to accurately screen for melanoma, the most serious form of skin cancer. In this instance, the use of the innovative technology could improve efficiencies for triaging patients to ensure more timely access to necessary care.

### **MEDICARE SHARED SAVINGS PROGRAM (MSSP)**

CMS finalized a major overhaul of the quality reporting program for accountable care organizations (ACOs) at a time when ACOs are experiencing major challenges due to the COVID-19 PHE in the 2021 PFS rule. We urge CMS to phase in the restructuring of the MSSP quality program that was included in last year's rulemaking. We appreciate CMS' proposal in the rule to postpone some of the changes to the quality scoring program and the proposals to give ACOs several options for reporting quality in 2022. Comments on the specific ACO proposals in the rule follow.

### **Amended Quality Reporting**

#### ***CMS Should Maintain the Web Interface Reporting Option At least for the Next Two Years and Allow ACOs to Use Other Reporting Mechanisms***

In the 2021 Physician Fee schedule Final rule, CMS finalized a number of policies related to quality reporting and measurement for ACOs. Under these policies, for 2022, accountable care organizations (ACOs) would be required to report quality data on three electronic clinical quality measures/MIPS clinical quality measures (eCQMs/MIPS CQM). CMS proposes to delay the requirement that ACOs report all-payer eCQMs/MIPS CQMs and to extend the CMS Web Interface as a collection type for MSSP ACOs under the APM Performance Pathway for 2022 and 2023. In 2023, ACOs would be required to report on at least one eCQMs/MIPS CQM measure in addition to the Web Interface Measures.

We urge CMS to finalize its proposal to maintain the Web Interface as a reporting option for ACOs for at least the next two years while also allowing ACOs the option of using other reporting mechanisms. In addition, we ask that CMS remove its proposal to require reporting on at least one eCQMs/MIPS CQM in 2023. The operational challenges associated with reporting one eCQMs/MIPS CQM will be as difficult as reporting all three. Making the transition from the Web Interface to alternative reporting options (such as eCQMs) will cost many ACOs considerable time, money, and effort in changing workflows, paying for registries and adapting and modifying EHRs to comply with eCQM standards. Physicians and other health care professionals will need training to adjust to the new workflows.

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<sup>11</sup> See Soenksen et al., "[Using deep learning for dermatologist-level detection of suspicious pigmented skin lesions from wide-field images](#)," Science Translational Medicine, Vol. 13, No. 581 (February 17, 2021).

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It is important to recognize that ACOs use different approaches to combining clinical data across the ACO, which makes changes to reporting more challenging. Some ACOs have all of their participants on the same EHR platform, while others have participants that use different EHRs. For the ACOs with participants that do not use a common platform, and possibly even those on the same platform, it will be challenging to merge the data from the various EHRs to report MIPS CQMs or eCQMs. It will be necessary to determine how to combine the data from each system, which will require the use of an outside vendor and will be costly.

In addition, CMS clarifies in the rule that an ACO that submits eCQM quality data to CMS must de-duplicate the patient level measures data across its ACO providers to ensure that the aggregated QRDA III file that is submitted to CMS incorporates only quality data that meets the intent of the measure. QRDA III files are aggregate files with no patient identifier. Providers will need to work with their EHR vendors to develop systems that will enable de-duplication of the measures. At this time, most EHR vendors have not developed systems that aggregate data from all the practices and deduplicate at the ACO level.

The requirement that quality scoring for eCQMs is based on the ACO's patients from all payers, is also challenging for ACOs. To accurately measure the ACO's quality efforts, we recommend that the ACOs quality score be based only on the Medicare patients assigned to the ACO. The ACO does not have the same flexibilities to design care interventions for all patients treated by the ACO's participant clinicians nor the ability to access patient data for the patients not attributed to the ACO but treated by ACO participants. If CMS continues with scoring based on all patients, across all payers, the AAMC urges a pay-for-reporting approach to performance for at least one year. This approach will provide ACOs time to better understand the broader patient populations their participants serve and how to appropriately access the necessary data to design quality improvement activities for this expanded patient population.

Given the challenges with implementing this change in quality reporting, combined with the significant disruptions to patient care caused by the COVID-19 pandemic, the delay in mandatory eCQM reporting is critical to allow ACO's more time to prepare for these significant changes. In addition, we support CMS' proposal to allow an ACO that decides to report both the ten CMS Web Interface measures and the three eCQM/MIPS CQM measures to receive the higher of the two quality scores for purposes of the MIPS Quality performance category. This will enable ACOs to test how reporting eCQMs will work for their practice in 2022 without the risk of being penalized.

Lastly, we oppose the proposal to increase the quality data completeness standard from 70 percent to 80 percent beginning in 2023. If CMS chooses to move forward with the all payer requirement, we request CMS lower the data completeness level to no more than 60% and have a more phased in approach to any increases. As stated earlier, it will be difficult due to challenges with access to data for ACOs to track patients and provide interventions when there is no direct relationship with the ACO. As ACOs implement system changes needed to report eCQMs, additional issues may be discovered that could also impact data completeness. Lowering the data completeness score to 60% will give additional flexibility and time to become familiar with the new quality reporting requirements and address any issues that are identified.

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***Quality Performance Standard Should Remain at 30<sup>th</sup> Percentile***

In last year's rule, CMS required that to meet the quality performance standard, the ACO score must be higher than the 40<sup>th</sup> percentile across the MIPS quality performance category. In this rule CMS proposes to delay adoption of a higher standard (40th percentile) until performance year 2024, allowing ACOs additional time to prepare for the transition to APP reporting. Specifically, CMS proposes in 2022 to apply the 30<sup>th</sup> percentile standard to only one (of three) specified APP measures for PYs 2022 and 2023 if all three are reported by an ACO. An ACO that fails to report on at least one specified APP measure for PY 2023 will not meet the quality standard regardless of its performance on the remaining measures.

The AAMC supports maintaining the 30<sup>th</sup> percentile standard in 2022. According to CMS, for performance year 2019 the MIPS Quality performance category score at 30th percentile was equivalent to 87.9 and the MIPS Quality performance category score at the 40th percentile was equivalent to 95.7, an almost perfect score. We are concerned that the score needed for the 40<sup>th</sup> percentile is very high and ACOs would be considered poor performers on quality if they did not have an almost perfect score. Roughly 1-in-5 ACOs, or approximately 20 percent, could fall below the 40th percentile MIPS Quality performance category score by performance year 2023, and would not be eligible to share in savings or would owe maximum shared losses, if applicable.

CMS seeks comment on whether publicly displaying prior year performance scores that equate to 30<sup>th</sup> or 40<sup>th</sup> MIPS quality performance category score would be helpful for providers. The AAMC supports displaying this information, which will promote transparency and enable ACOs to be better informed about the quality standards they must meet.

***CMS Should Give ACOs Options for Reporting eQMs, Including TIN-Level Reporting and Potential Sampling***

CMS seeks comment on whether to allow ACO providers to submit eQMs/MIPS CQM measures to CMS at the ACO participant tax identification number (TIN)-level and whether to incorporate a sampling approach as an intermediary step for ACOs before reporting measures across all patients.

As we noted previously in these comments, it is critical for CMS to recognize that ACOs use different approaches to combining clinical data. This presents challenges for ACOs in responding to significant changes, such as adopting ACO-level reporting for measures requiring clinical data abstraction and increasing the patient population on which the ACOs must report. Under the Web Interface reporting, ACOs are able to set up each participant TIN to report necessary data and have CMS aggregate submitted data for ACO-level scoring. Allowing this process to continue for ACOs that struggle to aggregate and de-duplicate patient data for ACO-level eQCM/MIPS CQMs could be a solution, while also recognizing that some ACOs have the capability to manage this new way of reporting and are ready to report across their participants. CMS should at a minimum maintain ACO-level reporting options in order to allow ACOs that have invested in the systems and infrastructure to manage wide-scale reporting and de-duplication.



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Similarly, in regard to patient sampling as an approach to migrating to eCQMs/MIPS CQMs, we believe CMS should have a choice-based framework for ACOs. Sampling might be preferable for ACOs struggling to implement the technological changes necessary to manage reporting for a significantly larger patient population across EHRs. But for ACOs that have invested in tools to adopt eCQMs/MIPS CQMs, sampling would defeat the purpose of eCQM reporting by removing the streamlined approach to clinical data abstraction and frustrate their efforts by adding a complicating factor after the fact.

The AAMC urges CMS to provide options to ACOs to address the significant shifts in quality reporting through eCQMs/MIPS CQMs to ensure that ACOs are neither unfairly left behind and unable to continue participation in the program nor halted in their current efforts to adapt to a changing quality reporting paradigm.

***CMS Should Not Mandate Additional Measures When Considering Quality Reporting Options for Specialists Within ACOs***

CMS seeks feedback on how best to balance the population health and primary care focus of measures in the new APP measure set and the reality that such measure may not always be applicable to specialists within an ACO. One option CMS could consider is for ACO participant TINs to report applicable MIPS Value Pathways (MVPs) as a part of assessing ACO quality performance. Alternatively, CMS could modify the Shared Savings Program measure set and/or the APP measure set to better incorporate measurement of specialists. The AAMC urges CMS not to increase measurement burden on ACOs in an effort to assess the role of specialists, as this could chill participation in ACOs. Currently, specialists serve an important role in ACO's by providing high quality care to their patients and ensuring that their patients are referred to the primary care physicians to receive appropriate preventive health care to improve population health.

Additional measures for the MSSP measure set would be counter to the intent of CMS to align the MSSP quality measure set with the APP performance measures in the MIPS program. Instead, CMS should allow ACOs the option to supplement ACO performance scoring if they wish to submit and incorporate MVPs scoring for certain specialists on a set of optional specialist-focused measures for more meaningful measurement of specialist performance within the ACO.

***CMS Should Invest in Supporting Data Collection Improvements and Encourage the Reporting and Use of Actionable Social Risk Factor Data to Promote Health Equity***

CMS seeks feedback on how ACOs can improve the quality of care provided across all patients they serve and address disparities that currently exist, as well as how the agency can encourage health care providers serving patients and communities with unmet social needs to participate in ACOs and other value-based care initiatives. The AAMC applauds CMS for its efforts to inform future proposals to address inequities in access to and outcomes of health care. As noted elsewhere in this letter, the COVID-19 pandemic laid bare the realities of longstanding inequities in our communities that must be addressed. Furthermore, we believe value-based payment initiatives are a complimentary tool for addressing inequities in health care delivery.

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Specific to the promoting health equity in the Medicare Shared Savings Program, we urge CMS to invest resources into improving data collection in a way that supports the collection of standardized multi-sector information regarding individual and community-based social needs. This might begin with the improved collection of demographic data that captures self-reported gender, race and ethnicity, though we urge CMS to be unambiguous that those factors themselves do not represent an individual's inherent risk. Rather that such data is serving as a proxy for unmet social needs until such valid, reliable, and actionable data for quantifying and capturing the actual risks of bias and unjust distribution of resources and opportunity that create the social and structural conditions that heighten inequities. CMS should not stratify quality performance on the basis of indirectly estimated race and ethnicity data while the field develops this gold standard of data collection and use for capturing individual and community-based unmet social needs. The AAMC discusses our strong concerns with such indirectly estimated data elsewhere in these comments.

One way CMS should invest resources is by committing to the development and evaluation of improved stratification and risk-adjustment models (for both quality and financial benchmarks). Many AAMC member teaching hospitals and health systems, including those who participate in ACO payment models, use electronic health records (EHR)-based screening tools in data collection to be better informed about the broader unmet health-related social needs in their communities. CMS should actively invest resources to explore whether there are ideas and solutions from the data science and research community on how best to standardize a roll-up of granular data for community use into a format for broader evaluation and analysis. CMS could partner on an effort led by the Office of the National Coordinator for Health Information Technology (ONC) to evaluate interoperability standards that roll data collected through screening tools up into social determinants of health (SDOH)-related ICD-10 z-codes to capture social risk factors and provide actionable data to inform intervention and be used for improved stratification and risk adjustment.

### ***CMS Should Seek Stakeholder Input on the ACO Quality Measure Set***

In the 2021 final physician fee schedule rule, CMS identified the list of quality measures that would apply under the APM Payment Pathway (APP) and to ACO clinicians. The APP measure set consists of 6 measures chosen to focus on population health and care delivered through APMs. MSSP ACOs would be required to report three measures (HbA1c Poor Control, Depression Screening and Follow-Up Plan, Controlling High Blood Pressure) and field the CAHPS survey. CMS would score the remaining two measures using administrative claims. The APP measure set would suffice for reporting under MIPS and, under the MSSP, the measure set also would be used to determine quality-based eligibility for sharing in any savings.

We appreciate the significant reduction in measures as it eases reporting burden. However, we recommend CMS seek stakeholder input on measure sets for ACOs from the Measures Application Partnership (MAP) and others. The MAP is responsible for evaluating measures for the MSSP to ensure the measures fit the program prior to implementation.

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### ***AAMC Supports the Update to Extreme and Uncontrollable Circumstances Policies***

CMS proposes to update the extreme and uncontrollable circumstances policy under the MSSP to reflect its proposals related to the quality performance standard. Specifically, for performance year 2021 and 2022 if the ACO is able to report quality data and meets the MIPS data completeness and case minimum requirements, CMS would use the higher of the ACO's MIPS Quality performance category score or the 30<sup>th</sup> percentile MIPS quality performance category score. If the ACO is unable to report quality data and meet the MIPS standards due to extreme and uncontrollable circumstances, CMS would apply the 30<sup>th</sup> percentile MIPS Quality performance category score. In future years, it would be set at the 40<sup>th</sup> percentile. AAMC supports this update.

### **Other ACO Topics**

#### ***AAMC Supports Expanding the Definition of Primary Care Services Used in MSSP Assignment***

CMS proposes to expand the definition of primary care services used to determine MSSP assignment in its regulations to include the following additional billing codes beginning January 1, 2022:

- 99X21 (chronic care management [CCM])\*
- 99X22, 99X23, 99X24, and 99X25 (principal care management [PCM])\*
- G2212 (prolonged office or other outpatient E/M service) \*
- G2252 (communication technology-based service) \*not yet finalized

**The AAMC supports the addition of these services to the primary care services used for MSSP assignment.**

#### ***Remove ACO Beneficiaries from the Regional Benchmark to Ensure ACOs are Not Penalized as They Achieve Savings for Their Assigned Populations***

CMS seeks feedback on the regional adjustment of MSSP benchmarks. Specifically, CMS wants feedback on how to account for the removal of ACO-assigned beneficiaries from the regional reference population, which is used to determine the regional portion of benchmarks.

When determining the ACO's benchmark, the AAMC urges CMS to remove an ACO's assigned patients when calculating the costs of patients in the ACO's region. This policy has a chilling effect on program participation. The CMS definition of the "region" for ACOs unfairly disadvantages ACOs that make up a large part of their market, which especially affects rural ACOs. It has been referred to as the "rural glitch" because of its negative impact on rural ACOs. Exclusion of assigned ACO patients from the benchmark would more fairly and accurately compare an ACO's spending to its surrounding area. We urge CMS to support legislation in Congress, the Accountable Care in Rural America Act (H.R. 3746), which addresses this problem.



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CMS suggests a formula to account for the removal of ACO-assigned beneficiaries. When the benchmarks were calculated using the formula, CMS found that some ACOs would benefit while others would be harmed by the change. **The AAMC recommends that CMS set a cap on the adjustment to the benchmark for ACOs that would be harmed by fixing the “rural glitch.”**

***CMS Should Re-Evaluate the Current 3 Percent Cap on Risk Score Growth in Light of the COVID-19 Public Health Emergency and Evaluate the Inclusion of Social Risk Factors into Risk Adjustment Models for ACO Benchmarking***

CMS seeks feedback on approaches to improve the risk adjustment methodology for the Shared Savings Program, specifically for ACOs with medically complex, high-cost patients. Inadequate risk adjustment as part of ACO financial benchmarking is an area of ongoing concern for the AAMC, especially in light of the COVID-19 PHE. We believe that CMS should reevaluate current policy to cap risk score growth at three percent over the course of five years, to instead consider whether a higher cap is necessary to address the significant reduction in clinical encounters since March 2020 and the beginning the pandemic. This reduction in encounters is likely to reduce the appropriate documentation of clinical risk and result in a significant temporary reduction in risk scores. The scores are likely to dramatically increase when clinical practice resumes to pre-pandemic levels. For example, hospitals have already noted a significant increase in CMI for hospitalized patients related to delayed diagnosis and delay in seeking care. This drastic artificial fluctuation is likely to hit the bounds of the current cap and could force some ACOs to exit the program.

As previously mentioned in these comments, the AAMC strongly believes that CMS should consider a variety of policy levers to improve social risk and demographic data collection as a path to addressing health equity. While mandating minimum data collection as a requirement may be one solution, we urge evaluation of incentives for ACOs to improve data collection in part through a commitment to improving risk adjustment models for the inclusion of social risk factors and/or for additional stratification of quality performance. The AAMC believes that patients, payers, and providers will benefit from partnership to improve health equity. CMS should lead the effort to demonstrate the benefit of better data to inform solutions.

**LABORATORY SPECIMEN COLLECTION AND TRAVEL ALLOWANCE**

***CMS Should Continue Payment for the Travel Allowance for COVID-19 Specimens***

During the PHE, CMS established a nominal fee for specimen collection for laboratory testing and a fee to cover transportation and personnel expenses for trained personnel to collect specimens from homebound patients and inpatients, in addition to the amounts provided under the Clinical Laboratory Fee Schedule. In the interim final rule for the response of the COVID-19 Public Health Emergency CMS established two new level II HCPCS codes, code G2023 and G2024 to identify specimen collection for Covid-19 testing for the duration of the PHE. This policy provides independent laboratories with additional resources to provide COVID-19 testing and helps with efforts to limit patients' exposure to others. CMS does not plan to continue this allowance after the PHE. However, stakeholders believe that even after the Covid-19 PHE has expired, testing will still be necessary to track the prevalence of the virus, prevent new outbreaks and identify new variants. The continued need for testing will mean that additional laboratory

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expenses and professional resources will still be incurred. Therefore, the AAMC encourages CMS to continue payment for specimen collection and the travel allowance for Covid-19 specimens, even after expiration of the PHE.

## **OPIOID USE DISORDER TREATMENT SERVICES**

### ***CMS Strongly Supports Extending the COVID-19 Flexibilities for the Opioid Use Disorder Treatment***

**For the same reasons mentioned in the previous section of our comment letter on audio-only mental health, the AAMC recommends Opioid Use Disorder (OUD) Treatment services should be furnished via telehealth and audio-only technology.** Audio-only services improve access to virtual care for patients who do not have access to the devices or broadband for audiovisual calls, are not comfortable with digital technology, or do not have a caregiver available to assist them. During the PHE, coverage and payment for audio-only calls has been critical to ensure access to care for some patients. Physicians have been able to provide a wide array of services efficiently, effectively, and safely to patients using the telephone. Examples of services include taking medical histories, ordering, or following up on lab and imaging tests, monitoring symptoms, and starting medications. Data from the Clinical Practice Solutions Center (CPSC), which contains claims data from 90 physician faculty practices, shows that approximately 30% of telehealth services were provided using audio-only telephone technology in April and May 2020. The proportion of telephone/audio-only visits increased with the age of the patient, with 17% of visits delivered via audio-only interaction for patients 41-60 years of age, 30% for patients 61-80 years of age, and 47% of visits for patients over 81.

Providers have found that when treating certain mental health conditions patients often benefit from obtaining services without visual contact with their provider. Audio-only technology allows patients to communicate with providers while maintaining a sense of privacy. This is particularly true in small towns and tightknit communities because of the negative stigma attached to seeking treatment for substance abuse. Therefore, it is critical that audio-only technology be permitted in instances where the beneficiary is unable to use, does not wish to use, or does not have access to two-way, audio/video technology.

**The AAMC supports creating a service-level modifier: Opioid Use Disorder Treatment furnished using audio-only technology.** This modifier would allow the collection of claims-based data and lead to the analysis of the use of telehealth and audio-only services. This information can then be used to determine the ways in which mental health services are being provided, improve clinical outcomes, and benefit patients.

CMS proposes requiring additional documentation in the patient's medical record to support the clinical appropriateness of audio-only technology. **The AAMC believes that documentation requirements for audio-only visits should be consistent with requirements for in-person visits to support the service.** We have supported CMS' proposal to establish a modifier for "audio-only technology" and we believe that is sufficient. However, if CMS decides to require additional documentation for audio only, we recommend allowing physicians to document one of the following three reasons that the visit is audio-only.

1. "Audio-only; patient unable to use two-way audio-visual technology"

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2. "Audio-only; patient does not wish to use two-way audio-visual technology"
3. "Audio-only; patient does not have access to two-way audio-visual technology"

### ***The AAMC Supports Establishing a New G-code for Take-Home Naloxone***

Naloxone is an extremely effective treatment for opioid overdose. Higher doses of take-home naloxone are necessary to combat more potent synthetic opioids<sup>12</sup>. This treatment is an important tool needed to combat the opioid crises and ultimately save lives.

### **ELECTRONIC PRESCRIBING**

#### ***CMS Should Delay Electronic Prescribing Compliance Date for Electronic Prescribing of controlled substances***

In the 2021 PFS final rule CMS provided a January 1, 2022, compliance date for electronic prescribing of controlled substance (EPCS) for a covered Part D drug under a prescription drug plan or an MA-PD plan. In the 2022 Proposed Rule, CMS expresses difficulties with implementation and proposes to change the EPCS compliance date from January 1, 2022, to January 1, 2023. **The AAMC supports the delay in the date for electronic prescribing of controlled substances for at least one year to address implementation concerns.**

### **OPEN PAYMENTS**

CMS requests input on specific aspects of the Open Payments program that could benefit from clarification to improve the quality of information published on the Open Payments website. The AAMC has engaged with CMS and our members throughout the development of Open Payments and appreciates the opportunity to improve the process and publicly available information. AAMC commends CMS' continued efforts to engage and educate the stakeholder community through guidance, "listening sessions," educational materials, and updated FAQs.

#### ***Payment Context Field for Teaching Hospitals***

The AAMC is supportive of CMS' proposal that a mandatory "context field" be added to reports of payments or transfers of value to teaching hospitals. Since implementation of the Open Payments program, the reporting of payments or other transfers of value by applicable manufacturers and group purchasing organizations (GPOs) have presented several challenges for covered recipients, and the AAMC continues to receive feedback that the review and dispute process is viewed as a significant barrier to meaningful participation in the Open Payments program. In the proposed rule, CMS acknowledges the feedback it has received from teaching hospitals, that "Open Payments submissions do not contain sufficient information to identify reported payments or other transfers of value in their own records," and proposes inclusion of a mandatory context field for payments or other transfers of value attributed to teaching hospitals.

In response to CMS' request for feedback on the CY 2017 Physician Fee Schedule Proposed Rule, the AAMC recommended the inclusion of "additional required non-public text fields to assist in the review and affirmation of disputes," and reiterated this recommendation in our response to the CY 2020 Proposed Rule, emphasizing here that additional context would

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<sup>12</sup> Moss, R.B., Carlo, D.J. [Higher doses of naloxone are needed in the synthetic opioid era](#). *Subst Abuse Treat Prev Policy* 14, 6 (2019).



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improve communication between the covered recipient and manufacturer, increase the accuracy of information in the Open Payments system, and build public confidence in the information reported. **The AAMC strongly supports CMS’ proposed addition of a context field that may include data such as a check number, electronic wire number, or related department of the hospital to better identify payments or transfers of value attributed to teaching hospitals.** We also agree that the additional field would help reduce burden for both reporting entities and teaching hospitals.

### ***Updated Contact Information***

CMS notes that in order to uphold the integrity of the data in the Open Payments program, it is essential for the agency to be able to contact reporting entities in cases of perceived irregularities or potential noncompliance, proposing that companies making reports into the system must have updated contact information in the Open Payments system at least every two years.

While we support this proposal and agree that effective communication between CMS and applicable manufacturers and GPOs is critical, it is equally important that CMS also consider the need for efficient and effective communication between covered recipients and manufacturers. **We urge CMS to require that contact information be provided with reported payments or transfers of value in a format that is readily available to covered recipients.** This will better facilitate timely communication between manufacturers and covered recipients and resolution of potential disputes within the review and dispute window.

We recognize that previous changes to the review and dispute process now include required non-public text fields for covered recipients (i.e., “Dispute Details and Contact Information”), which we expressed support for in our response to the CY 2020 Physician Fee Schedule Proposed Rule. However, as we highlight in our letter, covered recipients “have no systematic mechanism through which they can contact an applicable manufacturer with questions about payment records other than by disputing an unrecognized record.” Covered recipients still experience these difficulties and are unable to contact applicable manufacturers to clarify reported information during the review and dispute period before publication on the Open Payments website.

### ***Reducing Burden - Registration and Extension of Review and Dispute Period***

The AAMC appreciates CMS’ continued concern for the burdens associated with Open Payments reporting and related processes and recognize the system enhancements that have been made in direct response to stakeholder feedback. The responses to stakeholder feedback are evident and we encourage these continued collaborations before system or registration modifications are publicly released. Consistent with CMS’ efforts to reduce burden, we propose review of two areas: 1) Open Payments registration and 2) the length of the review and dispute window.

There continue to be difficulties associated with accessing the review and dispute system, including the amount of time it takes covered recipients to register in the CMS Enterprise Portal and Open Payments system has proven extensive. Efforts to streamline this process would decrease burden, frustration, and greatly increase involvement in the Open Payments program. In our response to the 2020 CY Proposed Rule, we offer the following potential solutions for consideration: 1. extend the timeframe for which a registration and password remains valid

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because the review and dispute process is annual and registered users find that they have been removed from the system each time they return; 2. eliminate or streamline the two-part registration in the CMS Enterprise Portal and the Open Payments system, and 3. increase the variety and number of characters for acceptable user passwords.

Additionally, the AAMC recommends that the review and dispute period last longer than 45 days. While we recognize the statutory parameters pertaining to the 45-day review and dispute period, we note that this time period must be *at least* 45 days and can be extended with no rulemaking change. The benefit of a longer review and dispute window would be ensuring that covered recipients have ample opportunity to review payments reported about them and work to resolve disputes prior to publication of the data.

The AAMC community has greatly benefited from the Association's relationship with the Open Payments team and look forward to continued engagement in support of CMS' efforts to improve clarity and build public confidence in the Open Payments program.

### QUALITY PAYMENT PROGRAM

The AAMC appreciates CMS' efforts to continue to develop Quality Payment Program (QPP) policies that more effectively reward high-quality care of patients and increase opportunities for Advanced APM participation. We commend CMS' efforts to support clinicians on the front lines during the COVID-19 pandemic by providing burden relief through the extreme and uncontrollable circumstances policy. We support CMS' proposal to delay implementation of MIPS value pathways and to continue to allow quality reporting through the Web Interface in light of the COVID-19 pandemic. **The AAMC recommends that all measures used in the quality payment program be appropriately adjusted to account for the clinical and social complexity of patients. We encourage CMS to work with key stakeholders to identify longer term policy solutions in the future that would attain health equity for all beneficiaries and minimize unintended consequences.** Our comments on the proposals in the rule related to the QPP follow.

### **MIPS VALUE PATHWAYS (MVPs)**

In the 2020 PFS final rule, CMS established a new MIPS participation framework, referred to as MIPS Value Pathways (MVPs), that was scheduled to begin with the 2022 performance year; however, due to the COVID-19 public health emergency CMS proposes to delay MVP implementation until 2023. For 2023, CMS proposes seven MVPs and to make MVP reporting voluntary. CMS indicates that traditional MIPS will be maintained while a robust inventory of MVPs is built. The Agency expects to propose that after 2027 traditional MIPS would sunset and all MIPS eligible clinicians would be required to participate in MIPS via an MVP or an APM Performance Pathway.

**The AAMC strongly supports CMS' proposal to delay implementation of the MVPs until 2023.** Clinicians are on the frontlines treating COVID-19 patients. Now is not the time to burden clinicians with learning a new method of reporting under the MIPS program. The MVPs should be gradually implemented to ensure that they are meaningful for clinicians and their patients and not burdensome to report.

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**We support CMS’ proposal to make MVP reporting voluntary over the next few years. However, we have significant concerns with CMS’ proposal to sunset the traditional MIPS program at the end of 2027, making MVPs or the APP performance pathway the only mechanism for participating in the quality payment program.** There are a number of conceptual challenges with the MVP program and sufficient time will be needed to address them before sunsetting traditional MIPS. First, there would need to be enough measures available to create MVPs that are meaningful to the over 1 million eligible clinicians that participate in the MIPS program. Given the numerous physician specialties and subspecialties, it will be difficult to create a sufficient number of MVPs, especially by 2027. Development of MVPs will require significant input from physicians. **Under the MIPS program, the practices should be given the opportunity to assess the advantages and disadvantages and select whichever option is most meaningful and least burdensome for reporting in the MIPS program.**

### ***Subgroup Reporting***

To generate more clinically relevant information about clinician performance, particularly for clinicians in large multispecialty groups, CMS proposes to establish “subgroup” reporting for MVPs, which would be voluntary for the 2023 and 2024 performance years. Beginning in 2025, multispecialty groups would be required to report MVPs as subgroups. Subgroups would consist of a subset of a group that is identified by a combination of the group Tax Identification Number (TIN), the subgroup identifier, and each eligible clinician’s National Provider Identifier (NPI).

We appreciate CMS’ recognition of the importance of allowing a portion of a group to report as a separate subgroup on measures and activities that are more applicable to the subgroup than to the larger group, and to be assessed and scored based on the subgroup’s performance. We also appreciate the information CMS has provided in the rule regarding its initial thinking on how subgroups would be formed, opt-in to MVPs, and be scored, accompanied by a request for feedback.

As CMS considers how MVPs and subgroups would be operationalized, it is important to understand the unique challenges posed by the QPP for large multi-specialty practices such as those typically found in academic medical centers. Physicians at AAMC member institutions are organized into large multi-specialty groups known as faculty practice plans which often have a single TIN. Recent data shows that the practice plans range in size from a low of 128 individual NPIs to a high of 4,319 with a mean of 989 and a median of 816. On average these practices have over 70 adult and pediatric specialties and numerous subspecialties, such as burn surgery, cardiac surgery, and general surgery, to name a few. In some cases, faculty practice plans are highly integrated and make decisions about quality and care coordination as a single entity. In other instances, such decision-making occurs at the departmental or specialty level. With the large number of distinct specialties reporting under one TIN, it will be very challenging to identify MVPs that will be meaningful for the myriad of specialties and subspecialties in the practice. Even if multiple MVPs are selected for reporting, it will still be challenging to identify MVPs that encompass the scope of conditions treated and the vast number of specialties included in academic medical centers.

The AAMC supports the concept of subgroup identifiers that would allow reporting and performance measurement at the subgroup level. We also agree with the following approaches to subgroup reporting outlined in the proposed rule:



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- Requiring the subgroup to register.
- Establishing a unique subgroup identifier after registration submission
- Requiring a list of participants (TIN/NPI) who would be part of the subgroup identifier be provided to CMS and the name for the subgroup
- Assessing performance for quality, cost, and improvement activities at the subgroup level.

There are advantages and disadvantages to reporting under a subgroup MIPS identifier, an NPI, a TIN, or a combination depending on the physician practice. Under the MIPS program, the practices should be given the opportunity to select among these options. **We support CMS' proposal that other physicians in the group practice (same TIN) who are not affiliated with the subgroup that is participating in an MVP would retain the option to participate as a group practice in traditional MIPS.** We also support the proposal to allow the participant to receive the highest final score that can be attributed to their TIN/NPI combination from any reporting option (traditional MIPS, APM Performance Pathway reporting, or MVP reporting and participation option (as an individual, group, subgroup, or APM entity).

#### ***Development of MVPs Should be Collaborative***

Physician input is critical in the selection of measures and activities for MVPs in the future. **AAMC supports a collaborative process for the development of MVPs that includes physicians, medical societies, and other stakeholders.** Representatives from appropriate specialties and subspecialties should be consulted as MVPs are developed. CMS should ensure that criteria used to select MVPs are well defined and transparent to give developers clear guidance. MVPs should be required to help to improve the quality of care, provide value, be feasible to implement, be reliable, be meaningful to clinicians and their patients, and be actionable. Given that burden reduction was a rationale for moving to MVPs, we believe that these principles and burden reduction should be included in the criteria for development.

#### ***Subgroup Policy Should Allow the Physician Practice to Identify and Provide a List to CMS of the Physicians Within a Subgroup***

CMS asks for specific feedback on the composition of the subgroup. As stated previously, practices would need to identify which MVPs are meaningful for which physicians in the practice. Many specialties have multiple subspecialties. Within one specialty, the MVP that a subgroup chooses to report may be meaningful for one subspecialty but not for another subspecialty. In some instances, it may be appropriate for multiple specialties (such as internal medicine, family medicine, and endocrinology) to report the same MVP and be part of the same subgroup. We believe that the group practice is in the best position to determine which physicians in the practice should be part of the sub-group to which the MVP applies. Therefore, we recommend that the practice identify which specific physicians in the group practice would be participants in the subgroup and provide that list of participants' NPIs to CMS.

#### ***Population Health Administrative Claims Measures Should Not be Required in MVPs***

**The AAMC does not support the use of population health administrative claims measures as foundational to MVPs.** Instead, CMS should make population health administrative claims

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measures voluntary and allow practices to notify CMS about whether they want these measures to apply to their practice.

Administrative claims measures, such as hospital wide readmissions, are often not appropriate to attribute to individual physicians or practices, who may be unable to meaningfully influence their outcome. For example, specialties that are primarily ambulatory, such as dermatology, may have very little ability to impact hospital readmission. CMS' reliance on retrospective attribution for these measures also limits the ability of a physician or practice to make improvements in care since they do not know who their predetermined set of patients are.

***Subgroups Should Not have to Duplicate Reporting of Promoting Interoperability Data***

CMS states that the foundational layer of MVPs includes the full set of traditional MIPS Promoting Interoperability performance category measures. For 2023 and 2024 MIPS performance years, CMS proposes that an MVP subgroup is required to submit its affiliated group's data for the Promoting Interoperability performance category and the subgroup will be scored on those data. If the affiliated group also chooses to report as a group for the Promoting Interoperability category, the group would be required to separately submit its own data for that purpose. **The AAMC recommends that CMS not require subgroup level reporting of the Promoting Interoperability data if the affiliated group is also reporting that data.** Reporting the same data from the subgroup and affiliated group is duplicative and overly burdensome. CMS should be able to identify that the affiliated group has reported the PI information and use the data reported by the group to determine the subgroup's performance.

**ALTERNATIVE PAYMENT MODEL PERFORMANCE PATHWAY (APP)**

In 2021, CMS terminated the MIPS APM scoring standard, and in its place added the APM Performance Pathway as a new option for MIPS reporting and scoring for the clinicians in MIPS APMs. Alternatively, eligible clinicians in the APM can report through any other MIPS reporting option and be scored under the general MIPS standards.

Under the APP approach one set of six quality measures is used for all APMs subject to MIPS. CMS proposes to extend the CMS Web Interface as a reporting option for clinical quality measures under the APP Performance Pathway for use by clinicians of Shared Savings Program ACOs for 2022 and 2023 performance years (as was done for 2021, instead of requiring them to report only electronic clinical quality measures (eCQMs) through the APP). In 2023, ACOs would need to report at least one of the APP's three eCQMs in order to have their Web Interface data submissions scored. Beginning with 2024, only eCQM reporting under the APP would be available to ACOs.

**The AAMC supports the proposed extension of the Web Interface reporting as ACOs need more time to complete technology upgrades and make changes to clinical workflow in order to move exclusively to eCQM reporting.** There continue to be technical obstacles to aggregating data across multiple ACO participant TINs. We request that CMS remove the requirement for reporting at least one eCQM in 2023. It will be just as difficult to make the systems changes needed to report one eCQM as to report all three.

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## **ADVANCED ALTERNATIVE PAYMENT MODELS (AAPMs)**

### ***CMS Should Encourage Congress to Grant Authority to Set Thresholds in the Future at a Level That Would Encourage Participation***

To be classified as a qualifying participant (QP) or partial qualifying participant in an APM, providers need to meet or exceed thresholds based on patients seen or payment received for services provided through APMs. These thresholds, which were established by Congress, have been increased since the start of the program.

Originally, the Medicare statute had set higher thresholds for the payment years 2023 and beyond, where clinicians would need to have at least 75% of their revenue in the Medicare FFS program received through a Medicare APM, or 50% of their Medicare FFS patients would need to receive services through the APM, in order to be considered a QP. These thresholds are high and would have made it much more difficult for an eligible clinician to be considered a QP and to receive the 5 % bonus payment in 2023. Congress recognized that this would be a problem and addressed this in the CAA that froze the thresholds for payment years 2023 and 2024 at the 2021 and 2022 payment year levels. The thresholds for 2022 performance year, will remain at 50% of the revenue received through the APM and 35% of their Medicare patients receiving services through the APM.

We support the change to these thresholds, which is included in this proposed rule. However, we remain concerned about the increase to the thresholds that will occur in the 2025 payment year. The increasing thresholds in the future that must be met to be considered qualified participants in an advanced APM will discourage participation, thereby limiting beneficiary access to high quality and better coordinated care. It is very difficult for APMs to increase the volume of payments received through the APM or amount of Medicare FFS patients who receive services through the APM. It is especially difficult for ACOs in rural areas and those that include specialists since primary care determines ACO assignment.

## **TRADITIONAL MIPS**

### **MIPS Performance Category: Quality**

For the 2022 performance year, CMS proposes to set the quality performance weight at 30%, a 10% decrease from 2021. As in the past, there are several ways to report quality. Eligible clinicians can report a minimum of six measures and one of those six measures must be an outcomes measure or a high priority measure. CMS is proposing to extend the GPRO Web Interface reporting option for one more year until the end of 2022. CMS is proposing substantive changes to 195 existing quality measures, changes to specialty measure sets, and removal of 19 quality measures. CMS is also adding five new MIPS quality measures, two of which are administrative claims quality measures.

### ***The AAMC Recommends Maintaining the Quality Category Weight***

CMS proposes to reduce the weight of the quality measure to 30% to account for the 10% increase in the cost measure category weight. We have significant concerns regarding attribution and risk adjustment of the cost measures and the impact that the COVID-19 pandemic will have on the benchmarks and performance of the cost measures. **Given these concerns, the AAMC**



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**strongly recommends that CMS maintain the weight of 40% for the quality performance category for the 2022 performance year and maintain the cost weight at 20% to provide additional time to address concerns with the cost measures. While we acknowledge the statute includes language requiring a 30% weight for cost measures and 30% for quality, we believe that CMS could use some of the flexibilities granted due to the PHE to set category weights for 2022 that are different.**

#### ***AAMC Recommends Maintaining Existing MIPS Quality Measures***

The AAMC has concerns with the removal of additional quality measures from the MIPS program. There should be an opportunity for stakeholder input before any measures are removed from the program. Removing measures creates a lack of consistency of available measures in the program, which prevents CMS from measuring practices on improvement. It also impedes practices from focusing on applying improvement strategies and reduces the number of measures available to form MIPS Value Pathways (MVPs).

Faculty practices invest time and resources to implement quality measures and update their systems. **We recommend maintaining the existing MIPS quality measures to ensure consistency, reduce burden, and allow options in the future for MVPs.** Removing or changing measures forces a practice to pick new measures to satisfy MIPS requirements, requiring changes to systems and more education to clinicians. Often quality improvement takes several years and significant work to note consistent and improved change. Removal of existing MIPS measures thwart these efforts and measures should only be removed after extensive review and study. It also affects the ability to document and track performance improvement. Annual program changes increase administrative burden, add to complexity, decrease effectiveness of ongoing quality efforts, increase the cost of the program, and run counter to the Agency's *Patients Over Paperwork Initiative*.

#### ***AAMC Supports Use of Performance Year Benchmarks for 2022***

CMS proposes to use actual 2022 performance period data to set 2022 quality benchmarks rather than the default historical baseline period, which would be performance year 2020. Due to COVID-19 flexibilities regarding data submission in the first half of 2020, it is likely that CMS has substantial data gaps in 2020 data. Care has also been drastically changed due to the pandemic so the 2020 data should not be used to determine baseline performance for 2022. Therefore, **we support CMS' proposal to use performance year benchmarks for 2022 to ensure more accurate and reliable data.**

#### ***CMS Should Provide a Gradual Transition Away from GPRO Web Interface Reporting Option***

CMS proposes to extend the GPRO Web Interface (Web Interface) Reporting Option until the end of 2022. The AAMC commends CMS for proposing an extension of the Web Interface reporting option; however, we believe that it should be extended at least two years. Many faculty practice plans report quality in the MIPS program via the Web Interface. When the Web Interface is eliminated, eligible clinicians will need to use a different reporting mechanism. It will take considerable time, money, and effort to change workflows, pay for registries, and adapt and modify EHRs to comply with electronic clinical quality measure (eCQM) standards. **For these reasons, we strongly urge CMS to provide a gradual transition away from the use of**

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**the Web Interface reporting option. More time and thought must be given regarding how this will be implemented, and for group practices to assess their alternatives. At a minimum, the Web Interface should be continued for at least two additional years to give sufficient time for affected practices to implement a new reporting method.**

***CMS Should Maintain a Data Completeness Threshold at 70 Percent***

CMS proposes to retain the current data completeness thresholds at 70 percent through performance year 2022 and to raise the threshold to at least 80 percent beginning with performance year 2023. **The AAMC recommends maintaining the data completeness threshold at 70 percent instead of increasing it to 80 percent in 2023.** The 70 percent threshold is already very high, and providers need to focus efforts on addressing the COVID-19 PHE instead of taking on greater reporting requirements at this time. Some physicians under the same TIN provide services at multiple sites and - not all sites have the same electronic health record (EHR) platform or use the same option for reporting under MIPS. In these instances, the data needs to be seamlessly integrated across settings to facilitate reporting, which can be difficult. It is important to maintain the threshold at 70 percent until systems are better able to integrate data for reporting.

***AAMC Urges CMS to Consider Critical Questions Related to Measurement Design for COVID-19 Vaccination by Clinicians Measure***

To address the ongoing COVID-19 PHE, CMS seeks feedback on a draft *SARS-CoV-2 Vaccination by Clinicians* measure that would assess the percentage of patients aged 18 and over seen for a visit during the measurement period who completed a COVID-19 vaccination series. CMS intends for the measure to capture whether during each visit clinicians are ascertaining vaccination status and starting the vaccination series for patients who are not vaccinated, when applicable and feasible.

The AAMC strongly supports vaccination as critical protection against COVID-19, and we support<sup>13</sup> vaccine requirements for medical school and all hospital and ambulatory care setting employees based on the large and convincing body of evidence on the safety and efficacy of the vaccine. Recent surges in COVID-19 cases have emphasized the critical need to continue to get individuals vaccinated. We have partnered with the CDC to build confidence in vaccines in part by engaging member medical schools and teaching hospitals in outreach efforts to communicate transparently and dispel myths, with the goal of increasing vaccination rates. **We encourage CMS to take a deliberative approach to adopting measurement of clinicians on the basis of the vaccination rates of their patients due to the critical questions associated with measure design.**

Regarding measurement design, we believe there are significant questions remaining regarding the period of immunity conferred and whether (or how frequently) booster shots may be required. Those questions include:

- If boosters are required, must the booster be made by the same manufacturer as the original vaccine received?

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<sup>13</sup> See AAMC Press Release, “[AAMC Statement on COVID-19 Vaccine Requirements for Medical School and Teaching Hospital Employees](#),” (July 16, 2021).

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- And critically, will vaccine supply remain sufficient to ensure individuals can receive boosters if necessary?
- CMS notes that exclusions apply where a clinician documents that there is a patient contraindication, patient refusal, and/or a vaccination course was not administered due to vaccine being unavailable. Will the “unavailable” exclusion apply in cases where a clinician does not give a booster by the same manufacturer as the patient’s previous vaccination?
- Will reporting require clinicians to capture vaccination record cards in their EHRs as appropriate documentation?
- Will each patient visit contribute to numerator and denominator where a patient has multiple visits during the (unspecified) measurement period?
- Will all patients count towards all clinicians who furnish their care during the measurement period?

These questions directly impact the design and feasibility of a vaccination measure, and thus we believe such a measure may be premature to implement in the MIPS quality measure set due to unpredictable shifts in reporting requirements that could lead to unreliable data to CMS, clinicians, and the public.

#### **MIPS Performance Category: Cost**

For the 2022 performance year, CMS proposes to weight the cost category at 30 percent, an increase from the 2021 weight of 20 percent. CMS plans to assess performance in the cost category by utilizing: 1) the Total Per Capita Cost of Care (TPCC) measure; 2) the Medicare Spending Per Beneficiary (MSPB) measure; and 3) episode-based cost measures (including five new episode-based measures). The AAMC is concerned about the cost measures used to measure clinician’s performance, particularly given the challenges with attribution and risk adjustment, which need further study.

#### ***The AAMC Recommends Maintaining the Cost Category Weight***

The AAMC acknowledges that statute requires CMS to increase the weight of the cost measure to 30 percent. **However, given the multiple concerns under the cost category, including the impact of COVID-19 on patterns of care, clinicians’ lack of familiarity with cost measures, the need for risk adjustment, and the need for better attribution methodologies, the AAMC strongly urges CMS to maintain the cost category at 20 percent.** We believe that CMS has flexibilities associated with the PHE that would enable CMS to maintain the of the cost category at 20 percent. Our concerns are enumerated in further detail below.

#### ***Cost Category Measures***

*All Cost Measures Must be Appropriately Adjusted to Account for Clinical Complexity and Social Risk Factors*

**The AAMC recommends that all cost measures used in the MIPS program be appropriately adjusted to account for clinical complexity and social risk factors.** The episode cost measures are risk-adjusted based on variables, such as age and comorbidities by using Hierarchical Condition Categories (HCC) data and other clinical characteristics. While the

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Total Per Capita Cost (TPCC) measure and the Medicare Spending Per Beneficiary (MSPB) measures are risk adjusted to recognize demographic factors, such as age, or certain clinical conditions, these measures are not adjusted for other social risk factors. In addition to differences in patient clinical complexity, social risk factors can drive differences in average episode costs. A recent report from the National Academies of Science, Engineering and Medicine<sup>14</sup> clearly acknowledged that sociodemographic status variables (such as low income and education) may explain adverse outcomes and higher costs.

The COVID-19 pandemic has demonstrated the importance of accurate risk adjustment. The virus has a disproportionate impact on racial and ethnic minorities, the homeless, individuals in long-term care facilities, the elderly, and those with underlying conditions. Literature has shown that patients who are already at high-risk due to social factors are at increased risk of serious illness related to COVID-19.<sup>15</sup>

Without accurately accounting for clinical complexity, and social risk factors, the scores of physicians that treat vulnerable patients will be negatively and unfairly impacted and their performance will not be adequately reflected in their MIPS score. Physicians at academic medical centers care for a vulnerable population of patients who are sicker, poorer, and more complex than many patients treated elsewhere.

The AAMC believes that there are ways to appropriately incorporate patient complexity and social risk factors in the risk adjustment methodology. We request that these measures be adjusted to account for these risk factors.

*Attribution Method Should be Clear and Transparent and Accurately Determine Patient/Clinician Relationship*

It is critical that when measuring costs there be an accurate determination of the relationship between a patient and a clinician to ensure that the correct clinician is held responsible for the patient's outcomes and costs. This is complicated given that patients often receive care from multiple clinicians across several facilities and teams within a single practice or facility. The attribution method should be clear and transparent to clinicians. We suggest that better data sources and analytic techniques should be explored in the future to support more accurate attribution of these episodes. Attribution is a key component of these cost measures.

*Cost Measures Feedback*

**As cost measures are still being developed and implemented, clinicians need time to gain more familiarity and experience with them before those measures represent a greater portion of the MIPS final score.** In CY 2019 the first wave of episode-based cost measures went into effect and in 2020 CMS added ten new cost measures. CMS is proposing to add five new cost measures in 2022. Additionally, CMS significantly revised the total per capita cost (TPCC) and Medicare Spending Per Beneficiary (MSPB) measures in 2020. These major changes occurred in 2020 at a time when physicians had to focus their attention on treating

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<sup>14</sup> National Academies of Sciences, Engineering, and Medicine. *Accounting for social risk factors in Medicare payment: Criteria, factors, and methods*. The National Academies Press. 2016. Doi: 10.17226/23513.

<sup>15</sup> Koma, W. et al. [Low-Income and Communities of Color at Higher Risk of Serious Illness if Infected with Coronavirus](#). Kaiser Family Foundation. May 7, 2020.



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patients with COVID-19, implementing telehealth, obtaining PPE, and addressing financial challenges due to loss of revenue.

Physicians need time to closely review feedback to determine the extent of unwarranted variation in spending and understand their patterns of care. Reports with detailed actionable data on performance on the cost measures are essential for providers to understand how they are performing, how they compare to other providers, and to identify what improvements they need to make.

Beyond the individual clinician reports, we also recommend that CMS analyze their aggregate data for each cost measure and release the data and their analysis publicly on an annual basis. This will enable a transparent assessment of whether the cost measures are working as intended.

*The Impact of COVID-19 On Cost Measures Needs to be Explored; Cost Measures That Would Lead to Inaccurate Results Must Be Excluded*

We are concerned that physicians and practices that have been on the frontlines treating COVID-19 patients will be unfairly penalized by cost measures. Physicians treating COVID-19 may have patients that are more likely to have complications, admissions, and readmissions due to the COVID-19 pandemic which may cause these physicians to receive lower scores on cost measures. It also is possible that the PHE may cause disruptions to attribution, reliability, and validity.

We are pleased that CMS recognizes in this rule that there is a need for additional flexibility in calculating the scores for cost measures to account for the impact of changing conditions beyond the group of MIPS eligible clinicians and groups, such as the COVID-19 pandemic. **We support CMS' proposal for the 2022 performance year and beyond to provide scoring flexibility by excluding a cost measure score in instances where changes during a performance period impede the effective measurement of resource use for that measure. We urge CMS to consider an option to reweight the entire cost category to zero (rather than excluding specific measures) when cost performance is impacted due to factors that are outside the control of the clinicians, such as the COVID-19 PHE.** The COVID-19 PHE has demonstrated that the assessment of costs can be significantly affected by substantial changes to clinical practice and service utilization.

*CMS Should Address Ongoing Concerns with Medicare Spending Per Beneficiary (MSPB) Measure and Total per Capita Cost Measure (TPCC)*

Despite concerns previously raised by many stakeholders, including AAMC, CMS plans to continue to include the MSBP and TPCC measures in the MIPS program for the cost category. While we appreciate CMS' recent efforts to refine this measure, we continue to have significant concerns. For cost measures, an accurate determination of the relationship between a patient and a clinician is critical to ensure that the correct clinician is held responsible for the patient's outcomes and costs. This is complicated since most patients receive care from numerous clinicians across several facilities. The MSPB measure and the TPCC measures holds physicians accountable for costs related to patients' medical conditions that are managed outside of their organization, and for costs they cannot control, such as drug prices. The measures also fail to risk-adjust for health-related social needs. In addition, the measures capture the same costs as the episode-based measures, effectively "double counting" the costs. Attribution, benchmarks, and

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risk adjustments for both measures also need to be reexamined in light of the COVID-19 pandemic.

**In light of concerns<sup>16</sup> raised by stakeholders, and the impact of COVID-19 on these measures, we recommend that CMS address the ongoing concerns with the validity, reliability, and risk adjustment for the MSBP and TPCC measures.**

**MIPS Performance Category: Promoting Interoperability**

For the 2022 performance year, the weight for the Promoting Interoperability (PI) category remains unchanged at 25%. CMS proposes to retain the Query of Prescription Drug Monitoring Program (PDMP) measure and make some changes to the Health Information Exchange Objective Measures.

***CMS Should Maintain Query of Prescription Drug Monitoring Program (PDMP)***

Specifically, CMS proposes to retain the Query of Prescription Drug Monitoring Program (PDMP) as an optional measure eligible for 10 bonus points for 2022. This decision was made due to several challenges that have been identified with implementing this measure, including difficulties in implementing it in electronic health record (EHR) clinical workflow and state variations in PDMP structure.

The AAMC supports maintaining the PDMP measure as voluntary and providing a 10-point bonus if reported. The AAMC recognizes the value of new tools to assist with the opioid addiction epidemic but cautions against making this measure required until the measure is more clearly defined and there is better evidence of integration of these tools in certified EHR technology (CEHRT) by vendors and into clinical workflows.

***Proposed Changes to Provide Patients Electronic Access to Their Health Information Measure Under the Provider to Patient Exchange Objective***

CMS proposes to modify the *Provide Patients Electronic Access to Their Health Information Measure* to require MIPS eligible clinicians to ensure that patient health information remains available to the patient (or patient-authorized representative) to access *indefinitely*, using any application of their choice that is configured to meet the certified technical specifications of the application programming interface (API) in the eligible clinician's CEHRT. CMS proposes indefinite access would apply to all patient health information from encounters on or after January 1, 2016 and invites comments on alternative dates.

The use of the term “indefinitely” is described as “that is, not merely for a defined period of time,” could mean that a clinician may be required to maintain patient health information well beyond a patient's death. This not only assumes that future generations will have the appropriate legal authority to access an ancestor's health information but also that electronic storage capacity is infinite. There are limits to data retention, and increased data stored simply means increased time for computing to filter the information and delays in the response time of EHR systems, directly impacting patient care. Increased data storage comes at a cost, which would have to be born somewhere. Furthermore, requiring indefinite data access would necessitate a drive to storing records via “cloud” services, where control and security of data is less certain and not

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<sup>16</sup> NQF [Cost and Efficiency Standing Committee Draft Report – Spring 2020 Cycle](#).

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guaranteed to be safe from bad actors. This of course says nothing to the environmental impact of data storage.<sup>17</sup> **For these reasons, requiring indefinite access is simply unreasonable, costly, and unsafe. The AAMC urges CMS to limit the requirement for patient health information to be accessible for a fixed minimum retention period such as ten years from last patient contact, matching its own current records retention requirements.**<sup>18</sup>

### ***Revised Information Blocking Attestation***

As part of PI category reporting, clinicians currently must attest to three statements concerning information blocking related to the CEHRT they use in their practices. We support CMS' proposal in the rule to delete two of the attestation statements, which are unnecessary and could create confusion.

### ***Request for Feedback – Patient Access Outcomes Measures***

CMS seeks comments on potential changes to the MIPS PI category to better target patient access outcomes related to the use of patient portals or third-party applications and asks a series of specific questions. We support broader patient access to their own health information as partners in care, but we caution against a future measure of patient access and use of such information. Patients use of their own health information is well beyond the control of providers and simply should not be used to reflect upon a provider's use of EHR technology. We oppose requiring providers to generate figures for the frequency of logins, number of messages sent, or lab results viewed as we do not believe that this information will inform improved patient outcomes or validly and reliably measure provider's use of EHR technology. The most a provider can do is to make options for access available and encourage patients to use them. **The PIP should focus on elements of EHR use well within a clinician's control, and not patient choices regarding how and when they access their health information.**

### ***Request for Feedback – Clinical Notes***

CMS seeks feedback on changes that will better support the availability of clinical notes to patients. Currently the ONC's rules for certified EHR technology require inclusion of clinical notes as a health data class as part of the United States Core Data for Interoperability (USCDI) to support the access, use, and exchange of electronic health information under the information blocking rules. With the information blocking rules in full effect as of April 2021, providers must provide access to clinical notes. It is unclear how incorporating measurement of access to clinical notes is separate and distinct from maintaining compliance under the information blocking rules and using CEHRT under the PIP. **The AAMC supports transparent communication among patients, families, and clinicians, but we believe this is best left to the purview of the ONC CEHRT and information blocking rules and should not be a new measure of meaningful use of EHR technology.**

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<sup>17</sup> AJ Dellinger, Mic.com, "[The environmental impact of data storage is more than you think – and it's only getting worse](#)," (June 19, 2019), describing in general the environmental costs of expanded data storage, including citing to a 2015 report that found data centers to be responsible for about 2 percent of global greenhouse gas emissions, similar to that of the aviation industry.

<sup>18</sup> See CMS MLN Matters® SE1022 "[Medical Record Retention and Media Formats for Medical Records](#)" (August 2012).

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**MIPS Performance Category: Improvement Activities**

***AAMC Applauds CMS' efforts to Close the Health Equity Gap in Quality Programs***

**AAMC supports CMS' proposals to address health inequity and promote anti-racism in part by adding a new improvement activity "create and implement an anti-racism plan", modifying five existing improvement activities to focus on health equity, and updating the complex patient bonus formula to include a social complexity component.** We agree that the inclusion of a proposed improvement activity titled "create and implement an anti-racism plan" is an important activity that will address systemic racism as a root cause of inequity. Our members have been focusing on efforts to address health inequity and promote anti-racism. We support CMS' efforts to improve demographic data collection to create a more accurate and robust data set that can be used to identify and address racial disparity within the program. To accomplish this CMS should focus on building trust within communities that have been historically marginalized in medicine. Building trust is pivotal to make patients feel safe and comfortable with disclosing demographic information. Although technology can be used to effectively collect and analyze data, in-person face-to-face conversations explaining how demographic information is being used to combat inequities and the privacy protocols that are implemented to protect patients' information could lead to a greater willingness for patients to self-report personal information.

**MIPS Final Scoring Methodology**

***AAMC Supports Continuing the Complex Patient Bonus for 2023 Payment Year***

CMS is required by statute (section 1848(q)(1)(G)) to consider risk factors in the MIPS scoring methodology. In CY 2018, CMS established a complex patient bonus of up to 5 points to be added to the final score for the 2020 MIPS payment year and continued this complex patient bonus in the 2021 and 2022 MIPS payment years. CMS proposes to continue to double the bonus to a maximum of 10 points for performance year 2021/payment year 2023. CMS determines eligibility for the complex patient bonus by measuring medical complexity through Hierarchical condition Category (HCC) risk scores, and social risk as measured through the proportion of patients with dual eligible status. CMS makes five proposals to better target clinicians who treat a higher caseload of more complex and high-risk patients, starting with performance year 2022.

**The AAMC supports doubling the patient bonus to account for the difficulty of managing complex patients during the pandemic.** It is important that clinicians are recognized for treating increasingly complex patients due to COVID. We are pleased that CMS is identifying approaches other than HCC scores and dual eligible patient status to better represent the clinical and social complexity of patients. **We request the CMS share more information on the proposed methodologies and provide testing and modeling of the proposals to enable providers to determine the impact of the approaches**



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## REQUESTS FOR INFORMATION

### *Advancing Digital Quality in Physician Quality Programs*

CMS seeks feedback to inform future rulemaking to support the Agency’s goal of transitioning to digital quality measurement in its quality reporting and performance programs by 2025. Comments specific to topics raised in the RFI follow.

#### *Definition of Digital Quality Measures (dQMs)*

The AAMC believes that improved EHR interoperability for the exchange and use of electronic health data has great promise to not only improve quality measurement and patient outcomes, but also to reduce burden on providers. **However, we encourage CMS to refine its definition of dQMs and set clear and specific parameters for what it hopes to achieve and what it expects of providers, especially physicians.**

The definition presented in this Request for Information is incredibly broad, and lists data sources including “administrative systems, electronically submitted clinical assessment data, case management systems, EHRs, instruments (for example, medical devices and wearable devices), patient portals or applications (for example, for collection of patient-generated health data), health information exchanges or registries, and other sources.” Not all of these data sources are ready for “prime time” and inclusion in quality measurement. For example, wearable devices and patient-generated health data hold great promise for the future but have not been vetted as valid and reliable interoperable data sources or as usable for clinical quality improvement and assessment. CMS should more clearly define what it expects the future of dQMs to look like, and how those expectations differ from the current state of quality measurement. The agency should also outline plans for piloting new data sources for quality measurement, identifying reasonable near-term and longer-term priorities. As we have seen with the transition to eCQMs from chart-based measurement, the goal for a future state might not be as easily met as initially envisioned. This is especially true for physicians, who are only beginning to implement reporting of eCQMs/MIPS CQMs. Finally, CMS should engage NQF in this work, to ensure that digital measure specifications are appropriately evaluated for utility in improving quality of care. The AAMC and our members are excited to partner with CMS and to collaborate on more specific plans for digital quality measurement for the future.

#### *Changes Under Consideration to Advance Digital Quality Measurement: Potential Actions in Four Areas to Transition to Digital Quality Measures by 2025*

##### *Leveraging and Advancing Standards for Digital Data and Obtaining All EHR Data Required for Quality Measures via Provider FHIR-based APIs*

The AAMC supports a long-term goal of implementing a digital and interoperable quality enterprise. Such an enterprise has great promise and could have positive and far-reaching effects of patient outcomes and experience. We also support the potential use of Fast Healthcare Interoperability Resources (FHIR), as this standard is internationally supported and easier to implement and more fluid than many other available frameworks. However, we encourage CMS to hone its approach to transforming its quality measurement enterprise by more clearly defining the goals and expectations for patients and providers, in particular considering the specific needs

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and capabilities of providers across settings. Again, this is especially true for physicians, whose CEHRT requirements do not yet include FHIR-based API capabilities.

*Digital Quality Measures as Self-Contained Tools*

CMS seeks feedback on a list of attributes and functionalities that dQMs could and should have. These range from simpler tasks, such as the ability to generate measure score reports, to more complex areas like being “compatible with any data source,” and “having the flexibility to employ current and evolving advanced analytic approaches like natural language processing.” Considering the breadth of expanded flexibilities and functionality listed, the AAMC urges CMS to engage stakeholders to determine which attributes can be sequenced and scaled, and to develop a prioritization framework for what realistically may be achievable with the Agency’s goal of transitioning to dQMs by 2025.

*Potential Future Alignment of Measures Across Reporting Programs, Federal and State Agencies, and the Private Sector*

**The AAMC strongly supports efforts to better align quality measures across federal, state, and private payer programs.** To do so with fully interoperable data is likely to require leadership from HHS, including CMS and the ONC, and a potential rethinking of its health IT certification activities. This is because health IT certification was initially designed to evaluate a product’s ability to meet minimum meaningful use requirements, and not necessarily on the quality, exchange and usability of data aligned with requirements for robust quality measurement. To realize the full extent of digital quality measurement requires EHRs that improve the capture, management, and communication of clinical information and better accommodate the needs of providers and their patients. Relatedly, quality measurement development does not always require inclusion of health IT developers to complete robust testing, resulting in insufficient test cases that do not ensure actual ease and accuracy of measure reporting in addition to ensuring that measurement is clinically useful. CMS will need to partner with ONC to prioritize concurrent certification requirements that validate dQMs and improve overall EHR user experience with measure development and implementation policy. Additional opportunity for alignment could relate to the collection and use of standardized social risk factor data collection and use in measurement. CMS should investigate potential incentives for encouraging alignment with providers and other payers. The AAMC would be very interested in working with CMS to better align quality measures and believe that initial stakeholder conversations would be productive in moving this concept forward.

**Closing the Health Equity Gap in CMS Clinician Quality Programs**

CMS requests feedback on making the reporting of health disparities based on social risk factors more comprehensive and actionable for hospitals, clinicians, and patients. The AAMC applauds CMS for its efforts to inform future proposals to address inequities in outcomes in its hospital quality programs. As noted elsewhere in this letter, the COVID-19 pandemic laid bare the realities of longstanding inequities in our communities that must be addressed. This work is critical to building a healthier future for all, and the AAMC strongly supports efforts to move the needle and ultimately eliminate inequity. To this end, the AAMC recently launched a 10-point

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strategic plan<sup>19</sup> to drive systemic change, including the creation of a new AAMC Center for Health Justice and an action plan dedicated to improving access to health care for all. The AAMC is helping to build academic medicine's capacity to contribute to advancing community health systems and to strengthen our sector's commitment to partnerships and policies that promote health equity and health justice.

A critical aspect of this work is the need for clarity on the role of health care quality and measurement in promoting health equity and community health. The AAMC believes that there is valuable overlap in these aims, but also that there are important distinctions that must be made when using quality measurement as a tool for improving equity. Health equity rightfully includes health care but must also evaluate and address broader community resources and needs. More and more evidence show that health care and genetics play a limited role in one's health compared to behavioral, social, and environmental risk factors.<sup>20</sup> Improving quality of care is only a factor within the broader health equity aim and should have the goal of evaluating and driving improvement in care delivery for all patient populations. Health equity data is more meaningful when it considers the community-level, and not just a single hospital.

To this end, when measuring equity, we must measure and shine light on the broad mix of factors at play in order to find appropriate solutions, including the role of measurement. Quality measurement of health care must measure factors which are in the control of providers and not the social factors that are outside the realm of health care delivery.<sup>21</sup> The role of improved risk adjustment that addresses clinical, social and functional status risk factors is crucial for ensuring accurate and fair assessment and ensuring that the safety net is not penalized by losing the very resources it needs. When paired with stratification, we can and should ensure that adjustment does not mask inequities, but rather highlights them in a way that points to appropriate intervention and guides investments needed to drive improvement. We believe that CMS can and should drive toward broader health equity in part through its value-based payment programs. CMS could use reporting of stratified measures to incent progress and demonstrate improvement in local care gaps over time. However, joining health care quality and equity with validated health equity measurement<sup>22</sup> must be tested as a means of driving improvement prior to adoption in the agency's hospital quality programs. In addition, we strongly oppose the use of health care quality metrics to rank hospitals on health equity. Addressing inequities in health requires collaboration and not competition. Rankings and tiers create divisions, rather than rewarding coalitions and sharing successful interventions.

**Specific to the MIPS Program, the AAMC supports the proposals to incorporate health equity and anti-racism into the Improvement Activities performance category.** We agree that the inclusion of a proposed improvement activity titled "create and implement an anti-racism plan" is an important activity necessary to address systemic racism as a root cause of inequity. We support the explicit link to health equity in both new proposed activities, such as implementing protocols for food insecurity and nutrition risk and trauma-informed approaches to clinical practice, and proposed modifications to existing activities in the program's current

<sup>19</sup> See [A Healthier Future for All: The AAMC Strategic Plan](#).

<sup>20</sup> See National Quality Forum, [Social Risk Trial Final Draft Report](#) at 5 (April 19, 2021).

<sup>21</sup> See [National Quality Forum Issues Quality Roadmap for Reducing Healthcare Disparities](#)

<sup>22</sup> See US Department of Health and Human Services Assistant Secretary for Planning and Evaluation, "[Developing Health Equity Measures](#)" (May 20, 2021).

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inventory, such as engaging Medicaid patients and clinical leadership in clinical trials or community-based participatory research. The AAMC encourages taking a structural measurement approach to health equity improvement as a crucial first step to addressing inequity through physician quality programs, in tandem with improving the underlying data to inform interventions.

**The AAMC supports the Agency in its efforts to address health equity in part through its quality programs.** We agree that this is critical work, and that CMS should pursue a thoughtful and considered approach to improve data collection in order to better measure and analyze disparities in a manner that builds an evidence-based, valid, and reliable framework towards provider accountability for health equity. As CMS reviews health equity care must be taken to determine which efforts can be addressed by providers and which require broader community efforts. Efforts should be routinely evaluated to ensure they are accomplishing intended goals.

***Future Potential Stratification of Hospital Quality Measures by Race and Ethnicity***

CMS seeks feedback on the potential future application of an algorithm to indirectly estimate race and ethnicity to support stratification of quality measures for *hospital-level* disparity reporting<sup>23</sup>, building off current confidential disparity reporting provided to hospitals for readmissions measures using dual-eligibility.<sup>24</sup> CMS is clear that “[s]elf-reported race and ethnicity data are the gold standard for classifying an individual,”<sup>25</sup> but that the Agency does not currently collect such self-reported data and that data accuracy of race and ethnicity data it receives from the Social Security Administration is not accurate or comprehensive enough for such stratification efforts. In response, CMS is exploring the use of indirect estimation methods as a short-term solution to identify better race and ethnicity data while developing sustainable and consistent programs to collect and leverage data on social needs or demographic proxies for risk, including self-reported race and ethnicity data.

As CMS describes in this RFI, indirect estimation relies on a statistical imputation method that infers a missing variable or improves an imperfect administrative variable using a related set of readily available information.<sup>26</sup> The other data sources that may be predictive of race and ethnicity include language preference, correlation of first and last names to specific national origin groups, and the racial and ethnic composition of surrounding neighborhoods matched with an individual’s address. CMS notes that while its efforts to develop indirect estimation efforts can be statistically reliable for calculating population-level results for groups of individuals, a risk remains of unintentionally introducing measurement bias.<sup>27</sup> The potential harm and ethical

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<sup>23</sup> 86 *Fed. Reg.* at 39348, clearly noting that the comment solicitation regarding the use of an imputation algorithm is specific to “measuring hospital equity,” and that CMS is not seeking feedback on the use of such a method for use in the MIPS program.

<sup>24</sup> While current stratification based on dual-eligibility is not the issue of discussion with this request for feedback, the AAMC would be remiss if it did not point to a recent study finding that broad differences in dual-eligible populations could mislead between-hospital comparisons using dual eligibility as a social risk factor. See Philip Alberti and Matthew C. Baker, “[Dual eligible patients are not the same: How social risk may impact quality measurement’s ability to reduce inequities](#),” *Medicine* Vo. 99, Issue 38 (September 28, 2020).

<sup>25</sup> 86 *Fed. Reg.* at 25558.

<sup>26</sup> *Id.*, citing a 2009 Institute of Medicine 2009 report, “Race, Ethnicity, and Language Data Standardization for Health Care Quality Improvement.”

<sup>27</sup> *Id.* at 25559.



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risks<sup>28</sup> must be more thoroughly evaluated and carefully considered to ensure that use of the indirect estimation method does not unintentionally mislead improvement efforts.

**The AAMC shares the goal to expand data capture and data harmonization in order to ensure providers have actionable information to inform improvement.** However, efforts should be made to promote valid collection of demographic data and data capturing an individual's social needs that will best inform intervention. **Race and ethnicity are not themselves risk factors<sup>29, 30</sup> and reliance on immutable characteristics alone is not informative for intervention.** Furthermore, measuring a gap is not the same as measuring equity. Disparities surveillance does not tap into patient populations' perception<sup>31</sup> of (or the reality of) equitable opportunity for optimal care. Stratified quality measurement's ability to reduce inequities is only as good as the stratification factors used – and dual eligibility and race and ethnicity as proxies for actual community risk factors and health-related social needs likely reduces the intended impact. **The AAMC urges CMS not to use indirectly estimated race and ethnicity data in confidential reporting due to our concerns with the accuracy and actionability of such data. Instead, CMS should invest in supporting data collection improvements, including how to standardize and use the data already collected by hospitals, understand which data may be most helpful to utilize and encourage the reporting and use of actionable social risk factor data, such as a number of social determinants of health (SDOH)-related ICD-10 z codes identified as actionable,<sup>32,33</sup> in quality and payment programs.**

### *Improving Demographic Data Collection*

The AAMC supports efforts to improve data collection and agrees that it should begin with the use of improved demographic data that captures gender, race, and ethnicity as an initial step in a larger process to investigate and remove inequities in health. In doing so it must be unambiguous that those factors themselves do not represent an individual's inherent risk. Rather, that such demographic factors may be critical proxies for social risk factors until it is feasible to quantify

<sup>28</sup> Megan Randall, Alena Stern, and Yipeng Su “[Five Ethical Risks to Consider before Filling Missing Race and Ethnicity Data](#),” Urban Institute (March 16, 2021).

<sup>29</sup> Angela King and Kim Shepard, “[Race is not a health risk factor. Racism is.](#)” National Public Radio (July 21, 2020), quoting Dr. Roberto Montenegro “When people look at health inequities, and they focus on differences by race, and they argue that race is a risk factor, it clouds the numerous factors that are really behind what people are intending to capture with race.”

<sup>30</sup> Sheets et al, “[Unsupported labeling of race as a risk factor for certain diseases in a widely used medical textbook.](#)” Journal of Academic Medicine (October 2011), which found that roughly two-thirds of assertions that different risk factors exist for Black patients found in a widely used pathology textbook could not be supported by the published literature.

<sup>31</sup> For example, refer to the Minnesota Department of Health's Guild, “[HEDA: Conducting a Health Equity Data Analysis](#),” Version 2 (February 2018), which recommends that health equity data analysis (HEDA) requires engaging populations that experience health inequities in the assessment process, including a principle for community engagement that stakeholders must learn about the community's perceptions of those initiating the engagement activities. Additionally, the AAMC's “[Principles of Trustworthiness](#)” project builds on foundational principle that trust is crucial for equitable community partnerships.

<sup>32</sup> See CMS Infographic “[Using Z Codes: The Social Determinants of Health \(SDOH\) Data Journey to Better Outcomes](#),” (Revised February 2021).

<sup>33</sup> See also AAMC Washington Highlights, [AAMC Submits Comments to CMS on Additional ICD-10 Codes for Social Determinants of Health](#) (May 2019)

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and capture the actual risks of bias and unjust distribution of resources and opportunity that create the social and structural conditions that heighten inequities.

Many AAMC member teaching hospitals and health systems use EHR-based social risk screening tools in data collection to be better informed about the broader unmet health-related social need in their communities. While several organizations have developed standard screening tools and core questions,<sup>34</sup> we have heard from members that they often modify the templates to ensure culturally appropriate dialogue with the patients and communities they serve. Addressing inequity in communities requires integrating local perspectives in partnership with health care organizations that have demonstrated trustworthiness. Dialogue and screening about social risk factors must be culturally competent and help to establish trust between patients and the providers. As this field continues to develop, **we believe that CMS should pursue a policy supporting the collection of standardized multi-sector social risk information to support improved stratification and risk adjustment, balanced with allowing local flexibility to promote community-based innovation and solutions.**

CMS should also explore whether there are ideas and solutions from the data science and research community on how best to standardize a roll-up of granular data for community use into a format for broader evaluation and analysis. This is a massive undertaking led by the GRAVITY Project<sup>35</sup> to advance interoperable social determinants of health data, beginning with three social needs: food security, housing stability and quality, and transportation access. CMS could partner on an effort led by the Office of the National Coordinator for Health Information Technology (ONC) to evaluate interoperability standards that roll data collected through screening tools up into social determinants of health (SDOH)-related ICD-10 z-codes to capture social risk factors and provide actionable data to inform intervention. From that, we could then evaluate which SDOH-related z-codes are best suited to incorporation in a minimum set of social risk factor data elements to require through EHR certification.

**While exploring the utility of additional individual demographic and social risk factor data elements, CMS should also evaluate the use and validity of community-based factors for improving data analysis necessary to inform quality and equity improvement activities.** For example, research<sup>36</sup> shows that community-defined social risk factors cause substantial shifts in projected performance on the Readmission Reduction Program's readmission models above and beyond individual level proxies. A clear benefit of community-based analysis compared to individual-level analysis is the reduced risk of compromising individual privacy in addition to ensuring the use of holistic approaches to broad, structural inequities. To this end, the AAMC urges CMS to evaluate the opportunity to partner with public health departments, who may already have robust data that supports neighborhood stratification. **Overall, data collection and systems for social risk factors at both the individual and community level should be used in**

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<sup>34</sup> Examples include CMMI's [Accountable Health Communities \(AHC\) Health-Related Social Needs \(HRSN\) Screening Tool](#), The National Association of Community Health Center's [Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences \(PRAPARE\)](#), and the [Health Leads Screening Toolkit](#).

<sup>35</sup> See Social Interventions Research & Evaluations Network (SIREN)'s [The Gravity Project](#).

<sup>36</sup> Baker et al., Health Affairs Vol. 40, No. 4, "[Social Determinants Matter for Hospital Readmission Policy: Insights From New York City](#)," (April 2021).

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**conjunction to best identify disparities in quality and equity and guide interventions for improvement.**

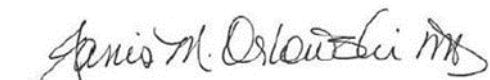
Finally, CMS should consider a variety of policy levers to improve hospital and clinician data collection. While mandating minimum data collection as a requirement may be one solution, we urge evaluation of incentives to improve data collection in part through a commitment to improving risk adjustment models for the inclusion of health-related social needs and/or for additional stratification in hospital quality programs. **The AAMC believes that patients, payers, and providers will all benefit from partnership to improve health equity. CMS should lead the effort to demonstrate the benefit of better data to inform solutions.**

## CONCLUSION

The AAMC continues to appreciate the work done by CMS during the public health emergency. We are committed to work collaboratively with the Agency to improve care delivery and study the lessons to be learned from the COVID-19 experience to enhance care, improve access and to promote equity.

The AAMC appreciates your consideration of the above comments. Should you have any questions, please contact Gayle Lee at [galee@aamc.org](mailto:galee@aamc.org), Ki Stewart at [kstewart@aamc.org](mailto:kstewart@aamc.org) or Phoebe Ramsey at [pramsey@aamc.org](mailto:pramsey@aamc.org).

Sincerely,



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September 1, 2021

The Honorable Chiquita Brooks-LaSure  
Administrator

U.S. Centers for Medicare & Medicaid Services  
200 Independence Avenue, SW  
Washington, DC 20201

**RE: Medicare Program; CY 2022 Payment Policies under the Physician Fee Schedule and Other Changes to Part B Payment Policies; Medicare Shared Savings Program Requirements; Provider Enrollment Regulation Updates; Provider and Supplier Prepayment and Post-payment Medical Review Requirements. [CMS-1751-P]**

Dear Administrator Brooks-LaSure,

The American Academy of Neurology (AAN) is the world's largest neurology specialty society representing more than 36,000 neurologists and clinical neuroscience professionals. The AAN is dedicated to promoting the highest quality patient-centered neurologic care. A neurologist is a physician with specialized training in diagnosing, treating, and managing disorders of the brain and nervous system. These disorders affect one in six people and include conditions such as multiple sclerosis, Alzheimer's disease, Parkinson's disease, headache, stroke, migraine, epilepsy, traumatic brain injury, ALS, and spinal muscular atrophy.

**Telehealth and Other Services Involving Communications Technology**

The AAN wishes to restate its gratitude for the flexibilities CMS enacted during the Public Health Emergency (PHE). According to the Kaiser Family Foundation, "Among the 33.6 million Medicare beneficiaries with a usual source of care who reported that their provider currently offers telehealth appointments, nearly half (45%) said they had a telehealth visit with a doctor or other health professional between the summer (July) and fall of 2020. This translates to just over 1 in 4 (27% or 15 million) of all community-dwelling beneficiaries in both traditional Medicare and Medicare Advantage using telehealth during this time period."<sup>1</sup> These accommodations allowed clinicians to adapt more easily to changing circumstances in order to maintain access and quality to care for patients who may have otherwise had their care compromised.

<sup>1</sup> Koma, W., Cubanski, J., & Neuman, T. (2021, May 19). Medicare and Telehealth: Coverage and Use During the COVID-19 Pandemic and Options for the Future. Available at <https://www.kff.org/medicare/issue-brief/medicare-and-telehealth-coverage-and-use-during-the-covid-19-pandemic-and-options-for-the-future>.



The AAN supports patient access to telehealth services regardless of location; coverage for telehealth services by all subscriber benefits and insurance; equitable provider reimbursement; simplified state licensing requirements easing access to virtual care; and expanding telehealth research and quality initiatives.<sup>2</sup> Telehealth and communication technology-enabled services (CTBS), such as telephone encounters, have become a lifeline connecting neurology patients with neurology providers. The choice to use telehealth technology is determined by the needs of the patient, the ability to access and use the technology, and the clinical problem to be addressed. Patients and caregivers alike have benefitted from expanded access to telehealth services both before and during the PHE. Patients report that access to care has improved, and that in many instances, telehealth services are more convenient and comfortable, and provide more confidentiality. Benefits accrue to outpatient and inpatient populations and apply to new and established patients requiring physician services and other services such as physical therapy and speech and language therapy.

The expansion of telehealth services for the Medicare population has been particularly beneficial to patients with cognitive and mobility impairments. AAN members report that being able to complete appointments at home has increased patient satisfaction. Often, patients with dementia are reluctant to come to the office for evaluation, partially due to the lack of recognition that a problem exists. The ability to complete telehealth visits eliminates the barrier of coming into a doctor's office to be seen. The ability to conference in additional family members without their needing to take extended time away from work to attend appointments has improved care coordination for this vulnerable population.

The AAN believes that CMS proposals in the 2022 Medicare Physician Fee Schedule are indicative of a positive trend in the ever-growing adoption of telehealth services. As acknowledged by CMS, various telehealth services spiked in their utilization early in the PHE but leveled off thereafter while others maintained a high utilization rate throughout the PHE. This demonstrates that patients and providers were able to identify those visits that were best suited to telehealth. CMS should continue to look for opportunities to furnish this kind of collaborative decision making between patients and providers to increase efficient access to care.

#### *Extension of Category 3 Medicare telehealth services list*

The AAN applauds CMS for its proposal to extend Category 3 authorization of telehealth services that have not yet been approved permanently through Categories 1 or 2. During the early stages of the PHE, patients and providers alike struggled to adapt to rapidly changing circumstances and the flexibilities CMS approved were critical to easing that transition. It is equally important to ease the transition out of the PHE so as to minimize confusion and disruption to care. By extending Category 3 through a set date, not linked to the end of the PHE, CMS is eliminating the unnecessary suspense and confusion that would have come from a more abrupt change.

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<sup>2</sup> Hatcher-Martin, J. M., Busis, N. A., Cohen, B. H., Wolf, R. A., Jones, E. C., Anderson, E. R., Fritz, J. V., Shook, S. J., & Bove, R. M. (2021). American Academy of Neurology Telehealth Position Statement. *Neurology*, 97(7), 334–339. <https://doi.org/10.1212/WNL.0000000000012185>.

The AAN is also heartened to see CMS acknowledge the great improvements that have been made in the provision of telehealth services during the PHE. Our members are working diligently to expand the evidence base supporting permanent approval for these services through Categories 1 and 2; the extended timeframe CMS is granting will prove vital to that process.<sup>3</sup> The AAN is adamant that identifying those telehealth services that meet the criteria of Categories 1 and 2 will result in expanded access to high quality care for patients.

*Telehealth services that should be added to Category 3*

The AAN was disappointed to see CMS reject requests to add Neurostimulators, CPT codes 95970 -95972, and Neurostimulators, Analysis-Programming services, CPT codes 95983 and 95984, to the Medicare telehealth services list using the Category 3 criteria. These codes are used for patients who often face unique challenges in accessing in-person care and we believe these services can safely and effectively be performed via telehealth. By not adding these services under Category 3, CMS risks disruption of care for these patients shortly after the PHE ends.

The AAN also believes that the hospital inpatient services, CPT codes 99218-99222, and observation care services, CPT codes 99234-99236, should be included on the Category 3 telehealth services list. While these codes were considered for Category 2 inclusion, the AAN believes that upon upcoming implementation of the E/M billing and documentation changes for inpatient services effective CY 2023, these codes will be eligible under Category 1 as the level selection criteria for these codes will be based solely on time spent on the visit or Medical Decision Making (MDM). Both of these elements can easily be satisfied and documented via telehealth. Removing these services for 2022 only to add them back for 2023 would cause unnecessary confusion and would needlessly bar patients from access to appropriate neurologic care.

*Frequency of in-person visits for continued telehealth care*

The AAN is glad to see CMS evaluating all elements of telehealth policy as the technology and methodology evolve. The AAN believes that removing obstacles to access to care is of upmost importance and therefore the requirement for in-person visits should be relaxed as much as is feasible. A variety of neurology patients have conditions that make travel to see their providers exceptionally difficult and patients of all specialties with socioeconomic vulnerabilities may be barred from the highest quality of care by unnecessary restrictions. In a study conducted by the Michael J Fox Foundation, 62 percent of respondents reported issues accessing health care, including canceled appointments or difficulty obtaining medications.<sup>4</sup> The AAN believes that patients and providers are capable of jointly identifying when an in-person visit is appropriate and thus a blanket restriction is unnecessary. The AAN

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<sup>3</sup> Hatcher-Martin, J. M., Busis, N. A., Cohen, B. H., Wolf, R. A., Jones, E. C., Anderson, E. R., Fritz, J. V., Shook, S. J., & Bove, R. M. (2021). American Academy of Neurology Telehealth Position Statement. *Neurology*, 97(7), 334–339. <https://doi.org/10.1212/WNL.00000000000012185>.

<sup>4</sup> Brown, E. G., Chahine, L. M., Goldman, S. M., Korell, M., Mann, E., Kinel, D. R., Arnedo, V., Marek, K. L., & Tanner, C. M. (2020). The Effect of the COVID-19 Pandemic on People with Parkinson's Disease. *Journal of Parkinson's disease*, 10(4), 1365–1377. <https://doi.org/10.3233/JPD-202249>.

believes that this timeframe should be eliminated or extended to as long as possible, at least to 12 months.

The AAN agrees with the proposal to allow a clinician's colleague in the same subspecialty and practice to satisfy any in-person requirement that does persist. Because of the possibility that an in-person visit requirement could block a patient's access to care, any accommodations that can be made to ease that burden is welcomed. As such, allowing for a clinician's colleague to satisfy this in-person requirement in their stead is appropriate.

#### *Audio-only telehealth services*

The AAN approves of the recommendation to make permanent the flexibilities for audio-only telehealth visits for behavioral health care. The AAN is glad to see CMS adapt to the ever-changing landscape for telehealth services. The use of audio-only telehealth has been a tremendous benefit for many older patients and others who struggled with audio/video technology for a variety of reasons. During the PHE, 56% of Medicare beneficiaries surveyed reported having a telehealth visit using a telephone only.<sup>5</sup> There is a substantial proportion of the neurology patient base who does not have access to or cannot operate computers or mobile devices that have video and audio capability. Furthermore, there are many patients who cannot afford broadband access or robust cellular data plans that would allow audio/video encounters to take place.

The AAN is disappointed that office/outpatient services, CPT codes 99441-99443, were not added to the telehealth services list as these are critical to access to care for patients that cannot access audio-video services. Older adults and patients without access to high quality broadband would benefit from these services. CMS acknowledges in this proposed rule the utility of audio-only visits for mental health services as many of these services "primarily involve verbal conversation where visualization between the patient and furnishing physician or practitioner may be less critical to the provision of the service." The AAN strongly agrees with this rationale and believes CMS should expand this to include other neurologic services that fit the same description such as headache, seizure, dementia, pain, along with adherence and side-effect follow-up. The AAN does not believe that any additional obstacles or documentation requirements should be placed on audio-only visits that are not currently mandated for audio-visual visits. Parity between these services is critical for ease of access and administration.

#### *Originating Site*

The AAN agrees with CMS's addition of a patient's home as a permissible originating site for mental health services as well as the removal of the geographic restrictions in § 410.78(b)(4). This is an important step in modernizing virtual care delivery and should be used as the model going forward for inclusion of other appropriate telehealth services, including those related to the neurologic community.

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<sup>5</sup> Koma, W., Cubanski, J., & Neuman, T. (2021, May 19). Medicare and Telehealth: Coverage and Use During the COVID-19 Pandemic and Options for the Future. Available at <https://www.kff.org/medicare/issue-brief/medicare-and-telehealth-coverage-and-use-during-the-covid-19-pandemic-and-options-for-the-future>.

*APP incident to supervision requirement flexibility*

The AAN supports permanently modifying direct supervision requirements so that direct supervision can be performed via real-time interactive audio/video technology in certain cases. Virtual supervision, when appropriately utilized, can be an excellent way to maximize supervised team-based care across a more distributed geography. Providers have demonstrated throughout the PHE that this flexibility has allowed them to expand access without compromising patient care. Therefore, CMS should revise the definition of “direct supervision” to include immediate availability through the virtual presence of the supervising physician or practitioner using real-time, interactive audio/video communications technology without limitation.

The AAN supports the creation of a service level modifier for the purposes of identifying APP (the AAN uses the term Advanced Practice Provider but will be using APP and NPP interchangeably throughout these comments) involvement in care. The AAN believes that this can be used as an information tool to benefit transparency and quality measurement. However, we ask the agency to consult with specialty societies as this change is developed and implemented to make sure there is not an unreasonable burden on providers.

*Virtual check-in services (HCPCS code G2252)*

The AAN approves of the permanent adoption of HCPCS code G2252 to allow for extended virtual check-ins and other brief communication technology-based services. This has proven itself to be a useful tool during the PHE to allow providers to work with patients to determine when office visits or other types of care are necessary. During the PHE this was critical in eliminating unnecessary exposure risks, however, those unnecessary visits were also contributing to the strain on the health care system more broadly. Communication technology-based services allow patients more frequent access to care when needed, eliminates much of the travel cost, and improves access for rural and urban patients alike. Allowing patients easier access to their providers outside of the traditional office visit provides an opportunity for collaborative decision making regarding when further care is needed while minimizing the burden to the patient and the health care system more broadly.

**Evaluation and Management (E/M) Visits**

The AAN applauds CMS for moving forward with the finalized coding and reimbursement structure for evaluation and management (E/M) services. The AAN remains supportive of the new coding and reimbursement policies for outpatient E/M Services since their implementation on January 1, 2021, which allow physicians to select the E/M visit level based on either total time spent on the date of the patient encounter or the medical decision making utilized in the provision of the visit. The AAN was deeply involved in the AMA CPT/RUC process to develop the new structure and concurs with CMS that it will produce a simplified and more intuitive system of E/M coding that is more consistent with the current practice of medicine and better aligns reimbursement with the value of cognitive care.

Currently, there are two sets of guidelines: one for office or other outpatient services and another for the remaining E/M services.



The main differences between the two sets of guidelines are that the office or other outpatient services use medical decision making (MDM) or time as the basis for selecting a code level, whereas the inpatient E/M codes use history, examination, and MDM and only use time when counseling or coordination of care dominates the service. The definitions of time are different for different categories of services.

For E/M services other than office or other outpatient services (Hospital Observation, Hospital Inpatient, Consultations, Emergency Department, Nursing Facility, Domiciliary, Rest Home, or Custodial Care, Home), providers may use face-to-face time or time at the bedside and on the patient's floor or unit when counseling and/or coordination of care dominates the service.

The AAN is encouraged by the steps CMS is taking to update reimbursement rules to keep up with the changing landscape of E/M billing. The AAN also appreciates the clarification from CMS on the distinction between billing incident to a physician compared to billing split (or shared). However, the AAN is concerned about the potential unintended consequences of some of the changes proposed to split (shared) billing rules proposed in the 2022 Physician Fee Schedule.

The change proposed to split (shared) billing rules represents a significant additional administrative burden to the care team and a major deviation from current inpatient coding criteria. This rule change would require physicians and NPPs to track the time they spend according to two different definitions of time to determine how the visit should be billed. While CMS references the changes to E/M billing for office visits, as stated in this rule, those changes do not currently apply to inpatient visits. As such, visits performed by physicians or NPPs would still be billed under the current level selection criteria using unit/floor time or elements of history, physical examination or medical decision making for level selection purposes. However, for determining substantive portion for split (shared) visits time would be measured by the more broad proposed definition of qualifying time. The AAN fears this policy will have the unintended consequence of significantly reducing the number of visits that are billed as split (shared) solely due to the difficulty of compliance. This would discourage team-based care and detract from quality of patient care.

The AAN recommends that CMS refrain from implementing the new time-based definition of the “substantive portion” criteria for split (shared) visits until the E/M revisions for inpatient services take effect. This will prevent a period of confusion as providers have to track the time of their visits according to the proposed definition of qualifying time for split (shared) purposes while still determining the level of service for other inpatient encounters according to the existing criteria. The AAN anticipates the 2023 Physician Fee Schedule to be a more appropriate opportunity to develop a new split (shared) framework as the inpatient E/M changes are being implemented.

While our primary ask of CMS is to delay any changes to the split (shared) billing rules until the inpatient E/M changes are proposed in the 2023 Medicare Physician Fee Schedule, the AAN does have recommendations for what changes CMS should consider at that time.

The AAN does appreciate the attempt to clarify how the “substantive portion” of a visit should be determined and agrees with CMS that merely “poking your head” into a visit is not adequate. However, we believe that rigidly limiting this determination to majority of time spent on the visit does not recognize the importance of contributions made to the key components of an E/M visit by a physician. Regardless of the method of determining level of service for split (shared) visits by time, we recommend that providers be given an alternative method to determine the substantive portion of the split (shared) service, defined as providing one of the three key components of an E/M visit—either the history of present illness (HPI), physical exam, or medical decision-making (MDM). If the physician provided one of these elements, the physician would be identified as the provider who performed the substantive portion of the encounter, would bill for the visit, and would be required to sign and date the medical record.

The AAN recognizes the accepted scope(s) of practice allows each member of the physician-led neurology care team to practice to the full extent of their professional license, training, and abilities. The AAN also recognizes and supports the expanded collaborative role that NPPs play in neurologic care while emphasizing they do not replace the need for neurologists. As such, the AAN appreciates CMS proposed change to split (shared) billing requirements to allow new and established patient visits to be billed split (shared). Eliminating unnecessary barriers to the efficient cooperation of a physician-led neurology care team is a welcome change.

The AAN agrees with CMS that critical care services and services performed in a SNF/NF setting should not be precluded from split (shared) billing. CMS is correct in its assessment of the changes to medical practice that are leading to better integrated team-based care delivery. Physician-led neurology care teams are often comprised of a variety of practitioners that work together to deliver optimal care for their patients.

The AAN is concerned about the potential narrowing of the definition of “group” for split (shared) billing purposes. Restricting this definition to only being inclusive of members of the same specialty would inhibit the coordination of a diverse care team and may have unintended consequences in regard to PAs who are not identified by specialty in the same way physicians are. The AAN believes that members of a care team working in the same practice or billing under the same tax identification number is an adequate justification for split (shared) billing.

The AAN supports the establishment of a modifier for these split (shared) visits that will allow for tracking the contributions of NPPs more easily, increasing transparency. This will allow providers, employers, and CMS to better evaluate the contributions of each member of the care team that will facilitate more efficient care delivery going forward.

### **Valuation of Global Surgery Packages**

In the proposed rule, CMS reminds stakeholders that the agency continues to assess values for global surgery procedures, including in particular the number and level of pre-operative and post-operative visits. This work is still ongoing. We write to reaffirm our support of the agency’s work in this area.

We concur with the agency's comments in last year's proposed rule, noting that "there are now important, unresolved questions regarding how post-operative visits included in global surgery codes should be valued relative to stand-alone E/M visit analogues." The AAN appreciates that CMS noted the key distinction that while post-operative visits may be similar to stand-alone E/M services, they are not the same. The medical-decision-making for the typical post-procedure outpatient visit is less complex than the typical stand-alone E/M. The post-procedure visit usually is concerned with a well-defined problem; and, by definition, the provider has taken a medical history and examined the patient a short time before the visit in the global period. Practice expense may differ for post-procedure visits, some of which require supplies such as suture removal kits and dressings. The resources required for postprocedural visits in the global period differ from resources needed for the typical office visit and we agree with CMS that these visits should be valued independently of typical office E/M visits. This approach is supported by MedPAC, which recommended "a budget-neutral payment adjustment for ambulatory E&M services – excluding the ambulatory E&M services currently considered when valuing global packages."<sup>6</sup>

The AAN appreciates that CMS is carefully considering the findings from RAND related to the disparity between expected and observed post-operative visits. We note that RAND, the Office of the Inspector General, and other reports support the conclusion that CMS is now paying for many postprocedural visits that do not actually occur.<sup>7,8</sup> The AAN concurs with CMS that "if the number of E/M services for global codes is not appropriate, adopting the AMA RUC-recommended values for E/M services in global surgery codes would exacerbate rather than ameliorate any potential relativity issues." Any investigation of the global billing periods will have limitations, but the AAN is not aware of any independent data that support the number of postprocedural visits indicated in RUC surveys and in current CMS global periods. The AAN is in agreement with CMS's assessment in the 2020 Final Rule that the current body of evidence "suggests that the values for E/M services typically furnished in global surgery periods are overstated in the current valuations for global surgery codes." Given the current evidence, increasing the values of the global surgery codes is in direct opposition to the mandate that services must be resourced-based.

It is of the utmost importance that the valuation of the global packages accurately reflects the work being done and that the values are supported by data. The AAN recommends that CMS continue to work to collect and analyze all relevant data, and to develop a resourced-based payment model.

### **Conversion Factor**

The AAN understands that the agency cannot waive its budget neutrality requirement without modification of existing legislation. Nor can CMS unilaterally add additional funds

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<sup>6</sup> Rebalancing Medicare's Physician Fee Schedule toward Ambulatory Evaluation and Management Services. June 2018. [www.medpac.gov/docs/default-source/reports/jun18\\_ch3\\_medpacreport\\_sec.pdf?sfvrsn=0](http://www.medpac.gov/docs/default-source/reports/jun18_ch3_medpacreport_sec.pdf?sfvrsn=0). p. 79.

<sup>7</sup> Kranz, Ashley M., Teague Ruder, Ateev Mehrotra, and Andrew W. Mulcahy, Claims-Based Reporting of Post-Operative Visits for Procedures with 10- or 90-Day Global Periods: Final Report. Santa Monica, CA: RAND Corporation, 2019. [https://www.rand.org/pubs/research\\_reports/RR2846.html](https://www.rand.org/pubs/research_reports/RR2846.html).

<sup>8</sup> Department of Health and Human Services, Office of the Inspector General. Cardiovascular Global Surgery Fees Often Did Not Reflect the Number of Evaluation and Management Services Provided, 1 May 2012. [oig.hhs.gov/oas/reports/region5/50900054.pdf](https://oig.hhs.gov/oas/reports/region5/50900054.pdf).

into the Fee Schedule. With that said, the AAN strongly supports the new January 1, 2021 E/M coding and reimbursement structure but notes that the subsequent reduction of the conversion factor may detrimentally impact some clinicians. The AAN is supportive of requests to Congress to waive budget neutrality, and add additional necessary funds into the Fee Schedule, provided that this would not result in a delay or in any way undermine CMS's decision to fully implement the new E/M coding and payment structure that started on January 1, 2021.

### **Principal Care Management (PCM)**

The AAN commends the agency's continued focus on the value of care management and coordination services, specifically with the recognition of comprehensive services for a single high-risk disease (that is, principal care management) which are commonly provided by neurologists. We are pleased CMS is proposing to accept the RUC recommended values of four new principal care management codes, 99X22, 99X23, 99X24, and 99X24 which will be effective in CY 2022. The agency is seeking stakeholder feedback whether keeping professional PCM and CCM at the same value creates an incentive to bill CCM instead of PCM when appropriate. We do not think this will be the case as specialty care providers, such as neurologists, often care for a single high-risk disease and did not previously meet the criteria for reporting other care management service codes that require the management of multiple conditions. As the patient population eligible for each service would differ, we do not anticipate an issue.

### **Billing for Physician Assistant Services**

The AAN supports the proposal to allow PAs to bill and be paid directly by Medicare. This change will bring parity between PAs and other NPPs which will simplify the billing process for physician-led neurology care teams that are increasingly utilizing NPPs. We also recognize CMS may be proposing this section to comport with new state laws.

With that in mind, we think this is an important moment to note that throughout the coronavirus pandemic, physicians, NPPs, nurses, and the entire health care community have been working side-by-side caring for patients and saving lives. Now more than ever, we need health care professionals working together as part of physician-led health care teams. The AAN vigorously opposes efforts that undermine the physician-patient relationship and physician-led health care teams during and after the pandemic. Nurse practitioners and PAs are integral members of the care team, but the skills and acumen obtained by physicians throughout their extensive education and training make them uniquely qualified to oversee and supervise patient care. Physician-led team-based care has a proven track record of success in improving the quality of patient care, reducing costs, and allowing all health care professionals to spend more time with their patients.

### **Appropriate Use Criteria**

The AAN applauds CMS for delaying the payment penalty phase until 2023. We previously supported the agency's decision to extend the educational and operations testing period for the Appropriate Use Criteria (AUC) program through the end of 2021. We believe this could



be extended further. The AAN appreciates that CMS recognized the impact that the ongoing PHE has had on providers' ability to participate in the current educational and operations testing period meaningfully. Delaying this program is necessary because during the PHE providers must ensure that resources are devoted to patient care, rather than compliance with burdensome regulatory programs. CMS acknowledges this, noting in the rule, "we recognize that practitioners have been heavily impacted in their own practice of medicine to respond to the PHE and provide treatment to patients which may have prevented them from focusing on and participating in the educational and operations testing period to prepare for the payment penalty phase."

Due to the PHE, providers are unlikely to have gained the experience they will need to fully participate in the AUC program after the education and testing period has elapsed. The AAN believes that further implementation of this program is likely to have significant detrimental impacts on timely patient access to care, which is already hindered by the ongoing PHE. As such, the AAN urges CMS to consider additional delays in the implementation of the AUC program. CMS should also consider whether the standalone AUC program is necessary or if programmatic requirements have become redundant due to provider participation in the Quality Payment Program.

**Requirement for Electronic Prescribing for Controlled Substances (EPCS) for a Covered Part D Drug under a Prescription Drug Plan or an MA-PD Plan (section 2003 of the SUPPORT Act)**

We previously supported CMS's decision to delay implementation of the statutory requirements related to the electronic prescribing for controlled substances for a covered Part D drug to January 1, 2022 because implementation takes additional time and resources. We further supported this delay because the ongoing PHE may present additional challenges for some prescribers. Because of this, we support the new compliance date of January 1, 2023. We further support the proposal regarding compliance throughout 2023 to consist of letters to prescribers that the agency believes are violating EPCS requirements.

We also agree with CMS that electronic prescribing of controlled substances provides many advantages over the traditional processing of paper prescriptions. These advantages include improved workflow efficiencies; deterring and detecting fraud and irregularities by requiring an extra layer of identity proofing, two-factor authentication and digital signature processes; enhanced patient safety through identity checks, safety alerts, medication menus, electronic history files, and medication recommendations that lower the risk of errors and potentially harmful interactions and providing more timely and accurate data than paper prescriptions by avoiding data entry errors and pharmacy calls to a prescriber to clarify written instructions. We agree electronic prescribing may reduce the burden on prescribers who need to coordinate and manage paper prescriptions between staff, patients, facilitates, other care sites, and pharmacies.

We appreciate that CMS specifically explained its interest in not burdening small prescribers. We agree for prescribers of very few Part D controlled substance prescriptions, the cost of installing EPCS equipment and software may be unduly burdensome relative to its benefits.

We support the proposal to exempt prescribers who prescribe 100 or fewer Part D controlled substance prescriptions per year.

### **Quality Payment Program (QPP)**

The AAN continues to support programs that allow neurologists to meaningfully participate in programs that seek to reward high-quality, low-cost care to Medicare patients, including the Quality Payment Program. The AAN appreciates CMS's flexibility during the ongoing PHE and acknowledgment of the exceptional pressures on the health care system and medical providers during this time. Consistent with our position in past years, the AAN urges CMS to extend flexibilities and reduce burdens associated with the QPP, especially for small and solo providers. The AAN continues to strongly support current relief or special scoring for small practices and appreciates CMS's proposed reweighting of the Promoting Interoperability component for these practices in this rule. We urge CMS to continue considering opportunities to offer support and ensure the successful participation of small and solo providers in the QPP, especially in the gradual transition to MIPS Value Pathways (MVPs) over the next several years.

#### *Performance and Data Completeness Thresholds*

The AAN understands CMS's proposal to gradually increase the performance and data completeness thresholds each year. While we would generally support these increases, the landscape has shifted to include managing the PHE, amongst other stressors. We suggest CMS to consider establishing a separate performance threshold for small practice providers. Historically, small practices struggle significantly to meet the performance threshold compared to larger group practices and clinicians that have a more robust infrastructure in place for data collection and reporting. CMS should reconsider raising the performance threshold to 85 points, especially for small practices.

#### *Complex Patient Bonus*

The AAN supports CMS's proposal to continue doubling the complex patient bonus for the 2022 performance year. Clinicians remain entrenched in attempting to balance caring for patients in the in-person and virtual environments while navigating through an ongoing PHE, all while participating in a generally burdensome program like MIPS and so the AAN welcomes this continued bonus. The AAN also supports the updated formula to include socially or medically complex patients.

#### *QPP Flexibilities*

The AAN urges CMS to continue extending the Extreme and Uncontrollable Circumstances Policy to MIPS eligible clinicians, groups and MIPS-APM entities as the COVID-19 public health emergency continues. The regulatory burden related to QPP reporting remains significant from year to year and is especially difficult for small practices to maintain. We appreciate CMS's flexibility and the relief offered to date and hope the option to reweight any or all the MIPS components due to COVID-19 remains for the duration of the PHE.

## **Closing the Health Equity Gap in CMS Clinician Quality Programs—Request for Information (RFI)**

The AAN believes that persistent inequities in health care outcomes exist in the United States, including among Medicare patients. We appreciate CMS's efforts to draft this RFI and solicit feedback aimed at closing disparities in health equity. The AAN appreciates CMS's note that a future comprehensive RFI will be focused on closing the health equity gap in CMS programs and policies. As a general matter, we support the creation of confidential reports that allow providers to look at patient impact through a variety of data points, including, but not limited to, LGBTQ+, race and ethnicity, dual-eligible beneficiaries, disability, and rural populations.

To create an inclusive environment to discuss these issues, there must be shared terminology. To this end, the AAN appreciates CMS's definition of equity as established in Executive Order 13985. The definition describes equity as "the consistent and systemic fair, just, and impartial treatment of all individuals, including individuals who belong to underserved communities who have been denied such treatment, such as Black, Latino, and Indigenous and Native American persons, Asian Americans and Pacific Islanders and other persons of color; members of religious minorities; lesbian, gay, bisexual, transgender, and queer persons; persons with disabilities; persons who live in rural areas; and persons otherwise adversely affected by persistent poverty or inequality."

In terms of specific proposals, we agree with the CMS Equity Plan for Improving Quality in Medicare, which aims to support Quality Improvement Network Quality Improvement Organizations (QIN-QIOs). We further support efforts as described by CMS which aim to close the health equity gap by providing transparency surrounding health disparities, supporting providers with evidence-informed solutions to achieve health equity, and reporting to providers on gaps in quality.

CMS cites the CMS Innovation Center's (CMMI) Accountable Health Communities Model which includes standardized collection of health-related social needs data. We believe other models from CMMI should include such data. We encourage CMS to use its authority to require EHR vendors to standardize race, ethnicity, gender identity, and sexual orientation data elements so comparisons can be made at the macro, and if possible, the micro-level.

We further support the creation of MIPS Improvement Activities, including one related to the creation and implementation of an anti-racism plan. However, we are unsure how CMS will incorporate activities geared toward disparities into MVPs considering most will want the activities to be disease specific or clinically focused. That said, we agree with CMS, as the agency notes, this improvement activity acknowledges it is insufficient to gather and analyze data by race, and documentary disparities by different population groups. Rather, it emphasizes systemic racism is the root cause of differences in health outcomes between socially defined groups. CMS further proposes to modify five existing improvement activities to address health equity and the AAN supports this proposal.

We additionally support the update to the complex patient bonus formula. CMS cites a report that supports use of the complex patient bonus in MIPS, explaining that it is well supported

because this policy gives additional points to clinicians with a higher share of medically and socially complex patients and does not lower the standard of care.

The AAN especially appreciates CMS's acknowledgment that small practices within the MIPS program often face challenges in many ways. We have consistently supported CMS's policies available for small practices, including the small practice bonus and other special scoring policies. CMS cites its significant hardship exception for small practices for the Promoting Interoperability performance category, another example backed by the AAN.

The AAN supports CMS's commitment to advance health equity by providing data collection to better measure and analyze disparities across programs and policies. CMS says it is considering expanding efforts to provide stratified data for additional social risk factors and measures, optimizing the ease-of-use of results, enhancing public transparency of equity results, and building toward provider accountability for health equity. The AAN would encourage CMS to require standardized data collection given the current disparate data collection and lack of uniform reporting categories for race and ethnicity across EMR platforms.

In the proposed rule, CMS discusses future potential stratification of quality measure results by race and ethnicity. CMS notes that incorrectly classified race or ethnicity may result in overestimation or underestimation in the quality of care received by certain groups of beneficiaries. The AAN agrees. We further support CMS's stated commitment to work with public and private partners to better collect and leverage data on social risk to improve our understanding of how these factors can be better measured in order to close the health equity gap. We are glad CMS has developed many resources, including an Inventory of Resources for Standardized Demographic and Language Data Collection, supported collection of specialized International Classification of Disease, 10th Edition, Clinical Modification (ICD-10-CM) codes for describing the socioeconomic, cultural, and environmental determinants of health, and sponsored initiatives to statistically estimate race and ethnicity information when it is absent. Without standardized data collection and categories across EMRs it will be difficult to implement accurate stratification.

We are encouraged that CMS has worked with contractors to develop two algorithms that indirectly estimate the race and ethnicity of Medicare beneficiaries. We agree with CMS that indirect estimation can help to overcome the current limitations of demographic information and enable timelier reporting of equity results until longer term collaborations to improve demographic data quality across the health care sector materialize. The use of indirect estimated race and ethnicity for conducting stratified reporting does not place any additional collection or reporting burdens on hospitals as these data are derived using existing administrative and census-linked data. However, we believe any public reporting of stratified results using indirectly estimated race and ethnicity must be published with context on the exploratory and informational use of the methodology and should explicitly include estimates of uncertainty.

The AAN believes that despite the high degree of statistical accuracy of the indirect estimation algorithms under consideration, there remains the small risk of unintentionally introducing measurement bias. CMS cites an example that if the indirect estimation is not as



accurate in correctly estimating race and ethnicity in certain geographies or populations, it could lead to some bias in the method results. Such bias might result in slight overestimation or underestimation of the quality of care received by a given group. However, like CMS, the AAN agrees this amount of bias is considerably less than would be expected if stratified reporting was conducted using the race and ethnicity currently contained in CMS's administrative data.

The AAN further appreciates CMS's commitment to improve demographic data collection. We believe the collection and sharing of a standardized set of social, psychological, and behavioral data by clinicians, including race and ethnicity, using electronic data definitions which permit nationwide, interoperable health information exchange, can significantly enhance the accuracy and robustness of equity reporting. This could potentially include expansion to additional social factors, such as language preference and disability status, where accuracy of administrative data is currently limited. The AAN believes this is especially true for patients who have neurologic conditions. We also appreciate CMS's concern for burdens, as the proposed rule notes additional resources, including data collection and staff training may be necessary to ensure that conditions are created whereby all patients are comfortable answering all demographic questions, and that individual preferences for non-response are maintained.

Furthermore, the AAN agrees that advancing data interoperability through collection of a minimum set of demographic data collection, and incorporation of this demographic information into quality measure specifications, has the potential for improving the robustness of the disparity method results, potentially permitting reporting using more accurate, self-reported information, such as race and ethnicity, and expanding reporting to additional dimensions of equity, including stratified reporting by disability status.

Finally, we do urge caution before developing any sort of "equity score." A poorly constructed equity score runs the risk of penalizing providers that choose to care for the most vulnerable and at-risk populations, or are located in areas with underlying socioeconomic inequities that cannot be fully addressed through the health care system. Direct, targeted health equity interventions focused on improving health and patient outcomes are likely to yield more immediate benefits for patients.

### **MIPS Value Pathways (MVPs)**

The AAN appreciates CMS's continued efforts to reduce the confusing and burdensome requirements currently required of eligible clinicians participating in MIPS through the establishment of MIPS Value Pathways (MVPs). However, we remain concerned that the new framework will present many of the same issues that MIPS currently suffers from, while also creating additional challenges within many specialty or condition specific pathways that will be difficult to manage and compare for both CMS and stakeholders developing MVPs. We believe MVPs should address the fundamental issues within the current MIPS structure, but the proposals included in this rule do not appear to be make participation, reporting and scoring more simple or straightforward, nor do they demonstrate the clear advantages of MVPs over MIPS. The AAN looks forward to continuing our collaborative relationship with CMS during future MVP development, however, we do have concerns that MVPs will

accomplish little more than MIPS in its current state and in its efforts to transition clinicians into alternative payment models (APMs), described below.

*‘Coordinating Stroke Care to Promote Prevention and Cultivate Positive Outcomes’ MVP Proposal*

In early 2021, the AAN had the opportunity to weigh in on CMS’s MVP proposal included in this rule titled, ‘Coordinating Stroke Care to Promote Prevention and Cultivate Positive Outcomes’ at CMS’s invitation. We appreciated CMS’s transparency, collaboration, and regard for our expertise with the condition at hand, some of which is reflected in the proposed MVP. We appreciate CMS’s inclusion of our feedback on several of the stroke measures included in the MVP proposal, including our concerns related to small practices’ barriers to participation. For future development years, CMS should develop guidance on how MVP topics are prioritized and how stakeholders are identified to participate in the input process.

The AAN understands that the quality measures included in the stroke MVP proposal are relevant to stroke and stroke prevention, but we remain concerned that the measures included are not widely applicable to stroke neurologists. Of the eight quality measures proposed, one is outside the scope of the neurologist (Q344), three are cross-cutting or would often fall to a primary care provider (Q047, Q236, Q441) and one is topped out (Q326), leaving neurologists with three measures to potentially report. The intent of MVPs is to offer more meaningful specialty or condition specific participation; however, we are concerned that this MVP will not be attractive to neurologists given the measures offered and dearth of outpatient stroke measures. We appreciate this MVP as a starting point and find the proposed improvement activities relevant to this MVP. While we note this MVP will include a condition-specific cost measure, we have concerns about its applicability and attribution to outpatient neurologists, as it currently assesses management of inpatient care for stroke patients. CMS should work with specialty societies and provide funding to them to develop clinically relevant, condition-specific cost measures for inclusion in future MVPs. The AAN also requests more information on how MVPs will be maintained and updated as more relevant measures become available that could bring additional clinicians in to participate in the MVP.

Since MVPs are voluntary, the AAN suggests CMS explore incentivizing MVP participation in the first years of implementation, or at the very least, hold clinicians harmless from a penalty for a designated transition period. As noted, while stroke falls within the neurology specialty, we are concerned that this MVP will not be widely applicable or enticing to many neurologists, especially those in small practices. CMS should consider offering an MVP incentive to those practices that participate in MVPs within the first few years of implementation.

*Timeline*

The AAN supports CMS’s proposal to gradually transition from traditional MIPS to MVP reporting on a voluntary basis as MVPs ramp up and more become available and clinically relevant to various specialties. While we understand CMS’s desire to start this transition in

2023, we are concerned that this timeline is infeasible. The lingering effects of the pandemic, pre-existing administrative burdens related to MIPS and other programs and a new MVP framework to implement, interest and uptake of MVPs may be low.

The AAN understands that MVPs are a repackaging of the MIPS program and so maintaining both MVPs and MIPS long-term would not be necessary or meaningful. We request CMS demonstrate the value of MVPs compared to MIPS before sunseting traditional MIPS, as we believe many of the issues present in MIPS will transition to MVPs if implemented as proposed. We caution CMS to carefully consider the potential implications a complete sunset of the MIPS program by 2027 would have not only on clinicians participating in MIPS, especially small and solo providers, but on those administrative, support and technical staff that are responsible for implementing yet another program with a new set of requirements within the next few years. This transition would require extensive time and resources for MVP development, including development of cost measures by stakeholders, before the implementation and adoption by end users (i.e., clinicians, group practices, and their support staff).

#### *Participation Options and Registration*

The AAN urges CMS to remain flexible regarding MVP participation options in the first several years of implementation and delay the requirement for multispecialty groups to break into subgroups by 2025 to a later year. As previously noted, clinicians are grappling with a multitude of factors that place understanding the process and implications for designating subgroups within MVPs at a low priority. While we understand that subgroups may more meaningfully measure clinicians, we are concerned about the administrative burden of maintaining and reporting for subgroups within a multispecialty practice.

CMS should offer clear and robust guidance on registration timelines and expectations. Given that MVP reporting is voluntary, we suggest CMS not only include MVP eligibility in the QPP Participation Lookup Tool, but also consider targeted communications to clinicians that qualify for a given MVP, with detailed information on the election process since traditional MIPS does not require registration.

#### *Reporting Requirements*

The AAN believes the proposed reporting requirements for MVPs are reasonable, including the population health measure requirement, four quality measures or all those that are applicable, two Improvement Activities and the standard Promoting Interoperability measures. However, we believe that there will be many instances where very few measures in an MVP directly apply to a clinician's work even if the condition falls within its specialty. For example, the proposed 'Coordinating Stroke Care to Promote Prevention and Cultivate Positive Outcomes' MVP is centered around a neurological condition, however, there are few outpatient stroke measures included, thus disqualifying many neurologists from participating meaningfully in the MVP as most of the measures are for the inpatient setting. CMS should prepare for and offer flexibilities for cases such as this. We also support CMS's consideration of connecting MVP reporting with continuing medical education (CME) credit.

CMS should consider offering more flexibility in reporting requirements, including cross-category credit or some type of automatic credit specifically for Improvement Activities. Inherent in many of the measures in MIPS, is a demonstrated commitment to activities that improve practice, resulting in duplicative, burdensome reporting. We suggest offering an automatic credit for Improvement Activities in MVPs similar to the offering in MIPS-APMs. This also would align with the overarching goal to transition from MVPs to APMs in the future.

### *Subgroups*

The AAN urges CMS to delay mandatory subgroup reporting for multispecialty groups. Subgroup implementation will pose significant burden on practice administrators if several subgroups are required within a TIN, assuming there are several MVPs that are available and apply across a multispecialty group. The AAN reiterates its request that CMS offer clear and robust guidance on not only MVP registration, but subgroup registration and reporting requirements. The proposed reporting requirements for subgroups could quickly become unwieldy for practices to maintain if multiple subgroups are formed within its TIN, which would be at odds with CMS's goal to develop a more streamlined, less burdensome reporting track via MVPs. CMS should clarify how each component of an MVP will be scored when reporting as a subgroup. For example, both population health and Promoting Interoperability measures are MVP-agnostic; however, CMS is proposing that subgroups can choose which population health measure to select and be scored at the subgroup level, while Promoting Interoperability measures will be scored at the TIN level. These nuanced requirements and changes between group and subgroup reporting are confusing and will be onerous to track and maintain. We encourage CMS to streamline requirements as much as possible within this added layer of complexity in subgroup reporting.

### *Performance Feedback and Public Reporting*

The AAN requests further information on CMS's proposal to include comparative performance feedback on MVP performance, including a definition of "similar clinicians". CMS hopes that MVPs will reflect the shared care that patients receive, and that multiple specialties may participate in an MVP by reporting the relevant measures to their specialty. For example, neurologists that practice in the inpatient setting and vascular surgeons may participate in the 'Coordinating Stroke Care to Promote Prevention and Cultivate Positive Outcomes' MVP. We request clarification regarding whether CMS plans to compare and score all clinicians that participate in the MVP amongst each other or if neurologists will be compared to other neurologists that participate in the MVP only.

### **Cost Component of QPP**

The AAN continues to have concerns with the MIPS Cost component. We believe that the risk adjustment and attribution methods used by CMS have not been adequately developed for MIPS cost measures. As the Cost component weight continues to increase, we request more education for clinicians that treat complex patient populations, including how this complexity is considered when calculating cost performance. In addition to more education, more transparency within this component is imperative. To date, CMS has not provided user-



friendly, discernable cost measure data for clinicians and groups to familiarize themselves with the component but continues to increase the weight of the component. We request clear, accessible guidance for clinicians who want to understand their cost performance and how it may be impacted by a small population of complex patients. Clinicians need to be aware that they may be attributed to acute hospital care costs, such as patient transportation, hospital overhead charges, some concurrent care during the acute episode, and skilled nursing facility charges. As part of CMS's educational efforts, we also strongly believe CMS should provide a clear rationale to providers as to why providers' reimbursements are tied to factors that are perceived as being out of their control. Examples of case studies to clarify how providers mitigate potential poor performance in the cost component would be helpful to all stakeholders.

For years, the AAN has advocated for more transparency and expanded opportunities for neurologists to be included in cost measures that are reflective of the team-based, interdisciplinary care that so many patients need and receive. While we are heartened to see CMS is willing to collaborate on the cost measure development process, we are concerned that the proposal to outsource cost measure development to stakeholders will have unintended, negative consequences. Since the QPP's inception and with each passing year, the responsibilities of specialty societies like the AAN, and its member volunteers, have increased significantly as it relates to QPP, including development and maintenance of quality measures and qualified clinical data registries (QCDRs). These responsibilities have expanded to development of MVPs, and now potentially development of cost measures. While we agree that specialty societies have unique, expert perspectives that lend themselves to specialty specific work, we encourage CMS to be cautious about foisting yet another burdensome process and responsibility onto stakeholders, especially one that stakeholders feel has lacked transparency over the years and have no control over.

Operationalizing a cost measure development process will take expertise and resources, as well as sufficient access to Medicare data. We suggest a more inclusive, transparent cost measure development process where stakeholders could work with CMS to edit inclusion, exclusion, and selection criteria measurement periods, risk adjustment methodology and benchmarking methods than attempt development at the individual organization level. It takes anywhere from 18-24 months to develop a measure, another 12-24 months to test a measure and additional time for review on the Measures Under Consideration (MUC) list. The timeline for cost measure development is inconsistent with CMS's expectation that measures could be available for MVPs in 2025. Beyond learning and growing expertise amongst staff and clinician members, stakeholders would need to account for the time and resources required for submitting future cost measures to the MUC list, an already burdensome process, in addition to maintaining their current quality measure rosters.

CMS should explore opportunities to work with the professional organizations representing clinicians to incorporate data from a broader group of clinicians in cost measures that have already been developed. In an effort to include more clinicians in cost measure calculations, we suggest that CMS consider alternative cost measurement methods that are based in a more meaningful attribution methodology without developing an unwieldy number of cost measures. For example, within an episode-based cost measure, neurologists could be held accountable for the neurologic-associated costs borne in an episode, such as neurology-

related E/M services, testing, medications, and other therapies, but not the rest of the episode, as the episode is not necessarily measuring a neurological condition. Receiving data related to an episode in which neurology is consulted or considered is valuable and informative, even if not central to the episode. CMS should consider repurposing current measures to incorporate more clinicians that play a role in an episode, not by attributing the entire episode to an individual clinician or TIN who bills a certain percentage of Medicare Part B claims, but by appropriately attributing certain aspects of an episode to the specialists who bear the costs and more accurately capturing the nuance and delineation within a given episode of care across providers.

Furthermore, the AAN requests detailed data on Cost component performance, including by specialty. CMS must share more data with specialty societies for them to feasibly understand and develop cost measures. Without robust, specialty-specific Cost component data, it is difficult for clinicians and practices to understand their Cost performance and difficult for specialty societies and other stakeholders to understand how to best educate membership on how to improve said performance and potentially develop cost measures in the future.

### **Quality Measures**

Regarding a timeline to sunset traditional MIPS, CMS should demonstrate that MVP reporting has proven effective and there is buy-in before creating a plan to sunset MIPS. Feedback from individual physicians and EPs indicates low buy-in to using MVP reporting as: 1) measures included do not address cost for most outpatient providers; 2) measures included in MVPs proposed are not meaningful to outpatient providers; and 3) it will require additional IT supports that are cost prohibitive, even to large institutions.

We also wish to address quality measure benchmarks. The AAN believes CMS should use 2019 data. Providers need notice on which measures will have benchmarks. 2019 data allows providers time to review their data, compare their performance to peers, and drive improvement based on the stated benchmark. Using 2022 data prevents meaningful assessment in advance of the performance year and hinders the ability to select measures that will maximize scoring in advance of the year.

CMS further outlined a methodology to estimate the quality performance category score. We believe the proposed methodology and transition from one methodology to another is too complicated. Providers need to understand how their score is calculated and which measures to select to optimize performance. Providers should be rewarded for submitting measures that are believed to be of higher priority.

### **Measure Testing**

The AAN agrees with the requirement that all measures approved in 2023 meet face validity in the initial MIPS payment year for which they are approved. The AAN suggests this requirement should be extended for future years. There are two issues that impact implementation of full testing.

First is the current health care environment and pandemic. Our health care providers are burning out due to the many competing priorities of practicing medicine during a global pandemic with no clear end in sight. Testing, even face validity testing, requires time that many clinicians just do not have. The National Quality Forum postponed review of measures in Fall 2021 in recognition of these challenges. CMS should further delay full testing requirements until it is clear providers have the bandwidth to provide high quality patient centered care, and assess measures for face validity.

Second is the CMS measure review process. CMS frequently requests changes to measure specifications during the QCDR application process. Given the revisions requests made by CMS, measures specifications are never static and continuous testing would be the only way to achieve this goal. Timelines do not allow for continuous testing. For example, if CMS suggests changes to a measure in May and the self-nomination period closes on September, four months does not provide sufficient time to modify measure collection, gather data, and complete testing.

Face validity should be sufficient for the initial performance year with an extended period to demonstrate further validity and reliability. The recent pandemic highlights the need to be flexible in adapting measures to meet physician and EP needs and addressing new gaps as they become evident in the field. Requiring additional testing restricts measure development innovation. CMS should be facilitating nimble data collection for meaningful measures.

### **Improvement Activities**

The AAN supports the inclusion of health equity in the improvement activities component of MIPS. AAN agrees that activities including health equity should be valued as high and weighted appropriately due to the burden of collecting this data. Additionally, where possible, providers should be encouraged to implement activities for longer than 90 days to track and impact real improvement. The AAN agrees with the changes, removals, and additions to the improvement activities available.

### **Interoperability**

EHRs changes resulting from the adoption of FHIR API to capture quality measures and requirements from the Cures Act on patient information sharing will increase burden by changing the way they document. These changes will challenge the usability of EHRs and ultimately will increase levels of provider burnout. The CMS FHIR API proposed rule to capture structured data for quality measurements only impacts small practices with limited means and those who use EHRs with less functionality. To successfully adopt dCQMs/FHIR APIs for eCQMs, health systems will have to modify or update their EHRs infrastructure, clinical workflows and ensure standardization of captured and stored data. For example, workflows that use free-text documentation would require changes to structured data entry. In addition, health IT would have to accommodate time for the iterative process of building templates that capture quality measures discretely and mapping data retrieval, adding more workload.

The AAN believes the transition to the FHIR standard for quality measurements can be facilitated by staged infrastructure support for iterative development, testing, education, and engagement efforts at both a practice level and measurement development levels. Much work is now present to demonstrate the need for systematic socio-technological integration to drive the adoption of technologies at scale. Support for an informatics workforce to facilitate this transition can be considered.

### **Digital Quality Measures RFI**

The AAN supports the transition to reporting methods that reduce EP burden to generate data needed for measure calculation. dQMs are one potential solution to reducing burden. The AAN is concerned the 2025 timeline is not realistic. FHIR implementation is not widespread, and provider based FHIR APIs are not widely available. There are privacy concerns related to using provider based FHIR APIs (transmitting and sharing this data) as well as concern solo/small practices might encounter unique challenges, and these concerns have not been fully investigated.

CMS suggests analytic advancements such as NLP, big data analytics, and artificial intelligence can support this evolution. Based on AAN's experience, health care technology companies are not equipped to widely implement these advancements by 2025. Additionally, we would further encourage CMS to include QCDRs as one way to collect dQMs.

### **Alternative Payment Models (APMs)**

The AAN continues to support the move towards value-based payment and Advanced Alternative Payment Models (Advanced APMs), however we remain concerned about the lack of approved models that address the patients and services for which neurologists are responsible. While we generally support the MVP framework, it is still unclear how clinicians are expected to transition from an MVP into an Advanced APM in the future. We continue to urge CMS to lay out how the MVP framework's intended goal to transition clinicians into Advanced APMs will be carried out in practice.

The AAN believes publishing data for both MIPS and APMs is imperative, and to date, CMS has not shared sufficient data on APMs, especially as they relate to specialists. We hope that CMS will provide clinicians and other stakeholders like the AAN with data on Advanced APMs, MIPS APMs, and Other Payer Advanced APMs including detailed participation and performance results, including by specialty. Again, we believe that providing stakeholders with a rich dataset that can offer an overview of the landscape of participation in value-based care models will help with understanding the breadth and opportunity that adaption of these models provides. Clinicians would also benefit from additional education on available APMs and how to determine whether participating in a particular model is appropriate for a particular clinician.

### **Conclusion**

We greatly appreciate this opportunity to express the views of the AAN in response to the Proposed Rule. The AAN strongly urges CMS to consider our comments so that the Final



Rule further reduces regulatory burdens on neurologists and promotes the highest quality patient-centered neurologic care. Please contact Daniel Spirn, Senior Regulatory Counsel, at [dspirn@aan.com](mailto:dspirn@aan.com) or Max Linder, Government Relations Manager, at [mlinder@aan.com](mailto:mlinder@aan.com) with any questions or requests for additional information.

Sincerely,

A handwritten signature in black ink that reads "Orly Avitzur MD". The signature is written in a cursive, flowing style.

Orly Avitzur, MD, MBA, FAAN  
President, American Academy of Neurology



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September 9, 2021

Ms. Chiquita Brooks-LaSure  
Administrator  
Centers for Medicare and Medicaid Services  
Department of Health and Human Services  
Attention: CMS-1751-P  
P.O. Box 8016  
7500 Security Boulevard  
Baltimore, MD 21244-8016

Submitted electronically: <http://www.regulations.gov>

**Medicare Program; CY 2022 Payment Policies under the Physician Fee Schedule and Other Changes to Part B Payment Policies; Medicare Shared Savings Program Requirements; Provider Enrollment Regulation Updates; Provider and Supplier Prepayment and Post-payment Medical Review Requirements.**

Dear Administrator Brooks-LaSure:

The American Society for Radiation Oncology (ASTRO)<sup>1</sup> appreciates the opportunity to provide written comments on the “Medicare Program; CY 2022 Payment Policies under the Physician Fee Schedule and Other Changes to Part B Payment Policies; Medicare Shared Savings Program Requirements; Provider Enrollment Regulation Updates; Provider and Supplier Prepayment and Post-payment Medical Review Requirements” published in the *Federal Register* as a proposed rule on July 23, 2021. ASTRO is very concerned about the financial implications this proposed payment rule will have on access to care for Medicare beneficiaries and radiation oncology practices across the country. Specifically, the cuts associated with the updates to clinical labor pricing and the expiration of the 2021 3.75% conversion factor increase have an incredibly onerous impact on community-based radiation oncology. **We urge the Agency to fully consider the impact of these draconian proposals on cancer treatment centers and patients and change course.**

The combined impact of these significant proposals means that payment for some radiation oncology services will be cut by as much as 23%. ASTRO is very disappointed in the Administration’s proposal to implement these cuts, which could restrict access to care and prevent cancer patients from receiving high-value, high-quality radiation therapy close to home.

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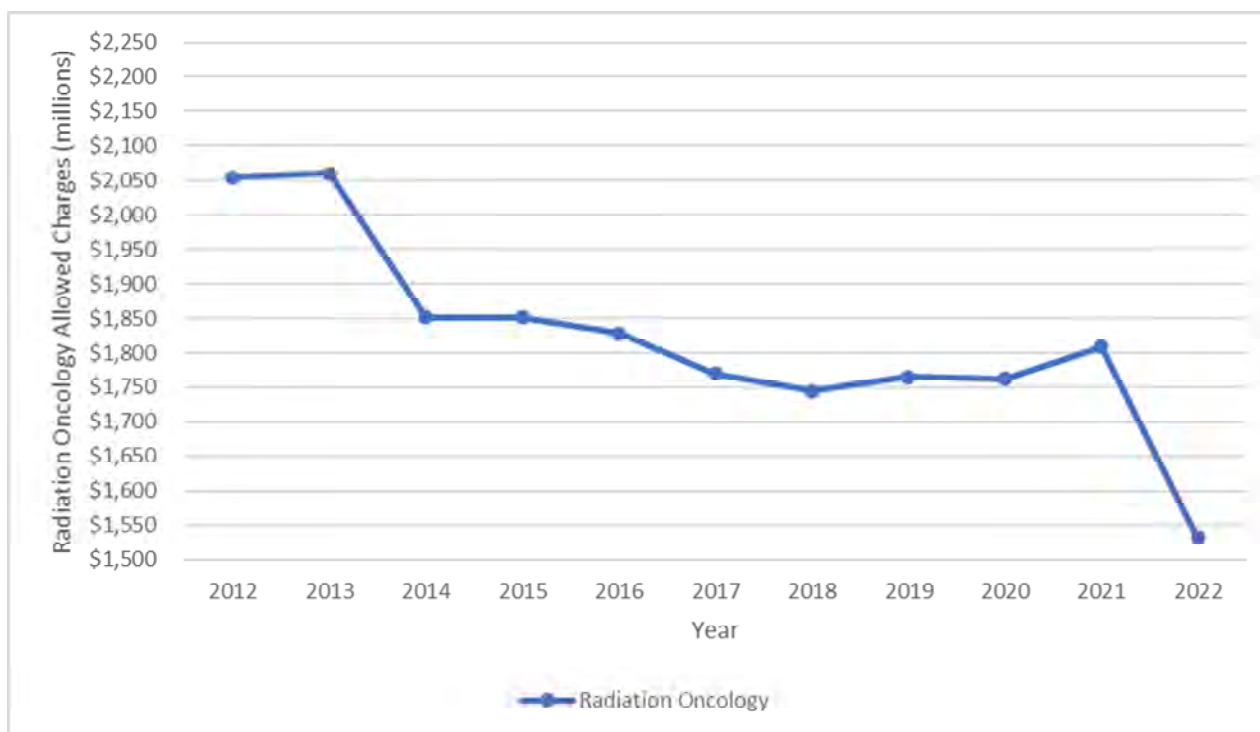
<sup>1</sup> ASTRO members are medical professionals practicing at hospitals and cancer treatment centers in the United States and around the globe. They make up the radiation treatment teams that are critical in the fight against cancer. These teams include radiation oncologists, medical physicists, medical dosimetrists, radiation therapists, oncology nurses, nutritionists, and social workers. They treat more than one million cancer patients each year. We believe this multi-disciplinary membership makes us uniquely qualified to provide input on the inherently complex issues related to Medicare payment policy and coding for radiation oncology services.

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We do not understand how radiation oncology is expected to contribute to President Biden's important goal of "ending cancer as we know it" in light of these cuts. Furthermore, our members cannot withstand such drastic cuts on top of the crushing revenue declines associated with the global pandemic. The COVID-10 public health emergency (PHE) reduced radiation oncology practice revenues by 8% in 2020, and another wave of COVID-19 infections is leading hospitals to cancel elective procedures and shift radiation oncology staff, which will again result in drops in patient volumes and revenue. During the PHE, radiation therapy treatments have been interrupted or truncated prior to completion due to COVID infection and/or local quarantine requirements for patients, family caregivers, or clinic staff. The full extent of these unanticipated disruptions on clinical care is impossible to determine, and the payment cuts in the proposed rule only add to this unprecedented challenge. If finalized, these newly proposed cuts will result in a 25% decline in radiation oncology allowed charges over the last decade (see chart below).



*\* Assumes 2022 proposed rates are finalized*

The proposed rule updates the payment policies, payment rates, and quality provisions for services furnished under the Medicare Physician Fee Schedule (MPFS) effective January 1, 2022. In the following letter, ASTRO seeks to provide input on the policy change proposals that have a significant impact on the field of radiation oncology. Key issues addressed in this letter follow:

- Payment Rates for Radiation Oncology Services
- Clinical Labor Pricing Update
- Direct PE Inputs for Supply and Equipment Pricing – Year Four of Four-Year Phase-In

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- Expiration of PHE Flexibilities for Direct Supervision Requirements
- Quality Payment Program Proposed Rule

### **Payment Rates for Radiation Oncology Services**

In the 2022 proposed MPFS, CMS is proposing significant rate reductions for radiation oncology services. The 2022 Conversion Factor is proposed to be set at \$33.58, a payment decrease of 0.14% over the original 2021 Conversion Factor update caused by the budget neutrality payment reduction. However, the 2021 Conversion Factor was actually set at \$34.89 due to the Consolidated Appropriations Act, 2021 (CAA) provision that increased MPFS payment amounts for services furnished during CY 2021 by 3.75%. The expiration of this increased Conversion Factor means the entire MPFS faces an immediate 3.75% cut before taking into consideration the impact of the 2022 proposed rule.

In addition to the expiration of the 3.75% CAA Conversion Factor increase, CMS is proposing to reduce payments for radiation oncology services for 2022 by 5%. This reduction is primarily due to increases in clinical labor pricing for some specialties, which has the effect of lowering payments to specialties that use expensive equipment, such as radiation oncology, in the budget neutral environment for practice expense (PE).

If CMS implements the changes fully as proposed for 2022, radiation oncology will face a combined reduction of more than \$140 million.<sup>2</sup> However, a more detailed analysis of the radiation oncology code set demonstrates that some services involved in the treatment of breast, prostate, lung, and other common cancers are more significantly impacted by the payment cuts than others. The chart below indicates that several high-volume radiation oncology codes will experience draconian cuts, some as much as 23%.

<b>CPT Code</b>	<b>MOD/SOS</b>	<b>CPT Descriptor</b>	<b>2021 National Rate</b>	<b>2022 National Rate</b>	<b>2022 Impact</b>
<b>G6015</b>		Radiation tx Delivery IMRT	\$ 385.57	\$ 336.52	-12.72%
<b>77427</b>		Radiation tx Management x5	\$ 191.91	\$ 190.43	-0.77%
<b>77014</b>		CT Scan for Therapy Guide	\$ 126.31	\$ 116.54	-7.74%
<b>77301</b>		Radiotherapy Dose Plan IMRT	\$ 1,935.17	\$ 1,677.56	-13.31%
<b>G6012</b>		Radiation Treatment Delivery	\$ 264.84	\$ 213.94	-19.22%
<b>77014</b>	26	CT Scan for Therapy Guide	\$ 45.36	\$ 44.33	-2.27%

<sup>2</sup> <https://www.ama-assn.org/system/files/2022-pfs-qpp-proposed-rule.pdf>



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<b>G6013</b>		Radiation Treatment Delivery	\$ 265.54	\$ 214.27	-19.31%
<b>77263</b>		Radiation Therapy Planning	\$ 169.93	\$ 166.58	-1.97%
<b>77373</b>		SBRT Delivery	\$ 1,172.06	\$ 907.13	-22.60%
<b>77301</b>	26	Radiotherapy Dose Plan IMRT	\$ 422.21	\$ 415.11	-1.68%
<b>77334</b>	26	Radiation Treatment Aid(s)	\$ 60.71	\$ 59.78	-1.54%
<b>77300</b>		Radiation Therapy Dose Plan	\$ 67.34	\$ 63.14	-6.24%
<b>G6002</b>		Stereoscopic X-Ray Guidance	\$ 77.11	\$ 74.89	-2.88%
<b>77336</b>		Radiation Physics Consult	\$ 82.70	\$ 74.22	-10.25%
<b>77338</b>		Design Mlc Device for IMRT	\$ 480.48	\$ 450.37	-6.27%
<b>77300</b>	26	Radiation Therapy Dose Plan	\$ 32.80	\$ 32.24	-1.70%
<b>77290</b>		Set Radiation Therapy Field	\$ 501.41	\$ 424.51	-15.34%

When an update has a significant effect on the valuation of services, “[CMS has] occasionally implemented significant updates based on new data through a phased transition across several calendar years.” As an alternative to an immediate change in clinical labor pricing, CMS is considering a 4-year transition to implement the updates, which “could smooth out the increases and decreases caused by the pricing update for affected stakeholders.” By CMS’s calculations, for radiation oncology, a phased approach to the clinical labor pricing updates changes the proposed rule’s impact in 2022 to -2%. **Phasing in the clinical labor pricing updates does not fully address the impact these draconian payment cuts will have on practices, and we urge the Agency to work with ASTRO and other medical specialty societies on a more comprehensive solution (see Clinical Labor Pricing Update below).**

ASTRO is deeply concerned about the drastic payment cuts proposed for 2022, especially with the economic hardships of the COVID-19 PHE still being faced by radiation oncology practices. Furthermore, the 2022 Hospital Outpatient Prospective Payment System Proposed Rule included the proposed rule for the Radiation Oncology Alternative Payment Model, which would bring an additional \$160 million in cuts to radiation oncology over 5 years. These cuts are simply untenable for many practices across the country, particularly in rural and underserved areas. The financial instability that these proposed payment cuts would cause will jeopardize access to safe and effective radiation therapy treatments for Medicare beneficiaries nationwide. This strain would be particularly acute among the office-based providers of radiation therapy services, for

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whom all services are paid under the MPFS and who care for nearly 35% of all patients treated with radiation therapy. **ASTRO strongly urges CMS to reduce and, at minimum, phase in the proposed updates to clinical labor pricing to blunt the impact the proposed rule will have on radiation oncology.**

### **Clinical Labor Pricing Update**

CMS is proposing to update the Clinical Labor Prices in conjunction with the final year of the supply and equipment pricing update. This addresses concerns that current wage rates are inadequate because they do not reflect current labor rate information, as well as concerns that updating the supply and equipment pricing without updating the clinical labor pricing creates distortions in the allocation of direct PE.

Our initial analysis shows updating the clinical labor rates is estimated to increase Medicare direct costs by 30%. Based on \$11.5 billion in Medicare allowed direct costs, we estimate the “price tag” for updating the clinical labor rates in CY 2022 will be about \$3.5 billion. By increasing the clinical labor pricing, physician services with high-cost supplies and equipment are disproportionately impacted by the budget neutrality component within the practice expense relative values.

In the proposed rule, CMS displayed the isolated anticipated effects of the clinical labor pricing update on specialty payment impacts in Table 6. CMS highlights in the text that specialties with a substantially lower or higher than average share of direct costs attributable to labor would experience significant declines or increases, respectively, if this proposal is finalized. The Agency goes on to say that the Table 6 impacts does not include complete impacts of all the policies the Agency is proposing for CY 2022, only the anticipated effect of the isolated clinical labor pricing update. The impacts published in Table 6 and Table 123 are misleading. For example, Table 123 shows radiation oncology at a -5% cut. In reality, the negative impact is much greater, with many radiation oncology services seeing reductions between -10% and -20%.

While ASTRO understands the impact tables are for illustrative purposes for aggregate impacts on specialties, and not meant to be code specific, ASTRO urges CMS to share actual impacts when they are so devastating to providers of office-based procedures with high supply and equipment costs. **CMS should publish a cost estimate for the clinical labor proposal, as well as impacts to illustrate how the proposal is actually impacting non-facility reimbursement rates for highly affected code families.**

The combined impact of steep reimbursement cuts and the continued pandemic risk the viability of many radiation oncology centers and their ability to provide lifesaving cancer treatment. **Therefore, we urge CMS to hold harmless the specialties that are bearing the brunt of this proposal and consider a more equitable way to update clinical labor pricing.**

### **Budget Neutrality**

Section 1848(c)(2)(B)(ii)(II) of the Act requires that increases or decreases in RVUs may not cause the amount of expenditures for the year to differ by more than \$20 million from what

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expenditures would have been in the absence of these changes. If this threshold is exceeded, CMS makes adjustments to preserve budget neutrality. This \$20 million "threshold" has been the same since the inception of the MPFS in 1992. **CMS should analyze the effects of implementing the clinical labor rates as they have proposed, after no change for 20 years, versus having implemented those updates more regularly. CMS should publish how the annual \$20 million restriction on changes to expenditures played a role in the clinical labor updates. CMS should also consider all the ways budget neutrality can be accounted for in the practice expense methodology, as there are several steps in the formula where budget neutrality is applied.**

#### Scaling Factors

The direct scaling factor is proposed to decrease -24% from 0.5916 in 2021 to 0.4468 in 2022. The practice expense component of the MPFS comprises approximately 45% of the total physician payment, and that percentage is fixed. Therefore, an increase in the clinical labor rates results in a shift of RVUs that were previously directed to supplies and equipment. Stated another way, Medicare will now reimburse 44 cents on the dollar, instead of 59 cents on the dollar, for supply and equipment costs.

Radiation oncology is a technology-driven specialty, and that technology is some of the most expensive equipment used in the entire House of Medicine. However, the technology used in radiation oncology has tremendously improved in precision, efficacy, and efficiency over the years and should continue to do so, but steep cuts to payment rates is a stick in the spokes of this wheel of progress. These proposed policies will likely prevent Medicare beneficiaries from receiving modern, less invasive cancer treatments close to their homes. At minimum, practices will be forced to cut back on staff, services and equipment. At a time when the radiation oncology community is seeking resources and support to improve access and quality for rural and underserved populations, these policies represent a massive step backwards.

Unlike other fields of medicine where operating costs are flexible due to low fixed costs, radiation oncology operating costs are inflexible due to high fixed costs. Radiation oncologists make significant capital investments in expensive equipment, such as linear accelerators, for the delivery of radiation therapy, and those costs are fixed over the life of the equipment. If payments change drastically, there is no way to accommodate those shifts through operating expenses without cuts elsewhere, including staff and services offered. Additionally, the high costs of maintaining this equipment remain the same whether or not the equipment is used. Loans will need to be restructured to account for the drastic cuts proposed or bankruptcies will ensue. It is reckless for CMS to propose a policy that would result in such a wildly fluctuating shift in reimbursement. The Medicare system should provide stable and predictable reimbursement for care rendered to its beneficiaries. **CMS should explore options to adjust the scaling factor(s) to more appropriately reimburse for expenses incurred to treat their beneficiaries.**

#### Clinical Labor Rates – BLS Data

CMS believes it is important to update the clinical labor pricing to maintain relativity with the recent supply and equipment pricing updates. CMS is proposing to use the methodology

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outlined in the CY 2002 PFS final rule, which draws primarily from United States Bureau of Labor Statistics (BLS) wage data. CMS believes that the BLS wage data continues to be the most accurate source to use as a basis for clinical labor pricing and this data will appropriately reflect changes in clinical labor resource inputs for purposes of setting PE RVUs under the PFS.

The clinical labor rates were last updated in CY 2002 using Bureau of Labor Statistics (BLS) data and other supplementary sources where BLS data were not available. In the proposal, 12 of the 32 staff types used “other sources,” instead of BLS data for pricing. These 2002 “other sources” data were not readily available for public review. For CY 2022, 14 of the 32 staff types are being updated using a BLS crosswalk because an exact match was not available. **To maintain transparency, CMS should publish the ‘other sources’ wage data details. In addition, CMS should update specific clinical labor wage rates based on stakeholder comments and data.**

The table below lists the proposed updates to the clinical labor prices that are of particular interest to radiation oncology. **While ASTRO appreciates the increases in rates for these radiation oncology-related positions, we request that CMS change its methodology for determining wage data for medical physicists.** The Agency is proposing to use the 75<sup>th</sup> percentile of the average wage data for the Medical Physicist (L152A) clinical labor type because it believes this level would most closely fit with historical wage data for this clinical labor type. Furthermore, the available Bureau of Labor Statistics (BLS) wage data describes a more general category of physicist, which is paid at a lower rate than a Medical Physicist. The BLS data includes data for health physicists and not medical physicists, who are typically employed by radiation oncology practices. Health physicists focus on the evaluation and protection of human health from radiation, whereas medical physicists use radiation and other physics-based technologies for the diagnosis and treatment of disease. As a result, **ASTRO is concerned that the BLS data does not accurately estimate the wages and compensation of medical physicists and unfairly disadvantages radiation oncology practices.**

**The American Association of Physicists in Medicine (AAPM) annually collects salary data on medical physicist wage and compensation data, and ASTRO recommends that CMS incorporate the AAPM 2020 medical physicist salary data in the 2022 clinical labor pricing update calculation.** In the 2002 final rule, when clinical labor prices were last updated, CMS chose to use AAPM’s survey data in lieu of BLS data because “[CMS] would not question the...assertion that the AAPM survey was more relevant to physicists working in radiation oncology than the survey [CMS] used to determine [its] proposed wage rate.”<sup>3</sup>

Labor Code	Labor Description	Source	Current Rate Per Minute	Updated Rate Per Minute	% Change
L050C	Radiation Therapist	BLS 29-1124	0.50	1.00	100%

<sup>3</sup> <https://www.govinfo.gov/content/pkg/FR-2001-11-01/html/01-27275.htm>



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L050D	Second Radiation Therapist for IMRT	BLS 29-1124	0.50	1.00	100%
L063A	Medical Dosimetrist	BLS 19-1040	0.63	1.07	70%
L107A	Medical Dosimetrist/Medical Physicist	L063A, L152A	1.08	1.45	35%
L152A	Medical Physicist	BLS 19-2012(75 <sup>th</sup> percentile)	1.52	1.80	18%

#### Data Elements in Wage Rates

The BLS data includes several data elements for consideration. In the clinical labor pricing update proposal, CMS utilizes the mean wage data to establish updated clinical labor rates, while the majority of the MPFS data inputs are based on the median. For example, when developing RUC recommendations (work and practice expense) the physician times, work RVUs, clinical staff times, and clinical staff types all use medians (i.e., "typical"). The BLS survey data also include wage rates for a variety of sites of service (e.g., hospitals, physician offices, farms) and wage data from a variety of industries. **We recommend the Agency utilize the median in its clinical labor pricing analysis to remain consistent with its other Medicare calculations.**

#### Fringe Benefit Multiplier

To account for employers' cost of providing fringe benefits, such as sick leave, CMS proposes to use the same benefits multiplier of 1.366 that was utilized in CY 2002. Using the fringe benefits multiplier rate from 20 years ago (2002) is not consistent with CMS's premise for updating the clinical labor pricing, which was to "maintain relativity with the recent supply and equipment pricing updates". BLS publishes benefits data routinely. **CMS should use a current fringe benefits multiplier.**

#### Timeline

Given the issues cited above, ASTRO believes the current clinical labor proposal requires additional analysis and modifications prior to implementation. There is further work to be done by both the Agency and stakeholders to ensure accurate data is used and appropriate methodological steps are taken for implementation. It is important to note that CY2022 will be the fourth and final transition year of the update to supply and equipment items—a proposal that also yielded significant shifts in payment rates. **CMS should fully consider stakeholders' serious concerns about the methodology and impact of the clinical labor price proposal and whether it would be more appropriate to publish an updated clinical labor proposal for the CY2023 regulatory cycle.**

Additionally, CMS has requested comment on whether to implement a four-year transition to the new clinical labor cost data. There is precedent for a phased transition for significant MPFS changes, across several calendar years. CMS utilized a 4-year transition for the market-based supply and equipment pricing update concluding in CY 2022. CMS also utilized a 4-year transition, starting in 2010, for the practice expense proposal. **CMS should use a 4-year transition to implement an updated clinical labor proposal, and given the above concerns**

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**about methodological flaws and severe impact, consider starting that transition in CY 2023. We also encourage the Agency to update clinical labor prices more frequently in the future, so as not to generate such drastic and destabilizing payment cuts caused by a 20-year gap.**

### **Conversion Factor**

For CY 2021, the MPFS Conversion Factor was set at \$33.63, a 10.2% reduction to account for the shift in payment across all medical specialties due to modifications in the valuation of the evaluation and management codes. As part of COVID-19 relief in the 2021 Consolidated Appropriations Act (CAA), Congress averted this significant cut by increasing the Conversion Factor by 3.75% to \$34.89.

In the proposed rule, the CY 2022 Conversion Factor is set at \$33.58, which represents a decrease of \$1.31, or more than 3%, from the 2021 MPFS Conversion Factor rate update of \$34.89. While the CAA prohibited CMS from using the updated figure in future Conversion Factor updates, the proposed CY 2022 Conversion Factor is still a decrease from the original figure for CY 2021 and an extremely negative impact to practices still in the midst of the COVID-19 pandemic. **Therefore, we urge CMS to press Congress to act and provide a positive update to the Medicare Conversion Factor in 2022 and all future years.**

### **Direct PE Inputs for Supply and Equipment Pricing – Year Four of Four-Year Phase-In**

In the 2019 MPFS final rule, CMS worked with market-research company StrategyGen to conduct an in-depth market research study to update the PFS direct PE inputs (DPEI) for supply and equipment pricing. CMS updated the Direct Practice Expense (PE) inputs for the pricing for over 2,000 supply and equipment items (1,300 supplies and 750 equipment items), including key equipment items related to radiation oncology. The changes in payment were significant, and to lessen the impact, CMS phased-in the new direct PE inputs over a four-year period. While we did not support the changes in radiation oncology supply and equipment items, we did appreciate the phased approach, which helped to mitigate some of the initially proposed reductions.

CY 2022 is the fourth and final year of the transition, which means that PE input pricing for the affected items in 2022 will be based on 100% of the new pricing. The chart below displays some of the significant price reductions for radiation therapy equipment.

	2020 Price	2021 Price	2022 Proposed Price
<b>ED033 Treatment Planning System, IMRT (Corvus w-Peregrine 3D Monte Carlo)</b>	\$273,896	\$235,571.50	\$197,247
<b>ER003 HDR Afterload System, Nucletron – Oldelft</b>	\$253,787	\$193,181.09	\$132,574.78

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<b>ER083 SRS System, SBRT, Six Systems, Average</b>	\$3,486,861	\$3,230,291.38	\$2,973,721.84
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**ASTRO appreciates CMS’s efforts to acquire current pricing information, but we reiterate our prior concerns that the recommended prices are below industry standards. Given the high cost of these items and their substantial utilization in certain radiation oncology delivery codes, it is imperative that CMS accurately reflect the marketplace pricing. Undervaluing equipment inputs has the potential to create access to care issues and potentially reduce the utilization of services that provide high quality patient outcomes, and we encourage the Agency to work with the American Medical Association’s (AMA) Relative Value Scale Update committee (RUC) Practice Expense Committee when reviewing the identified supply and equipment items CMS would like updated.**

#### **Expiration of PHE Flexibilities for Direct Supervision Requirements**

Direct supervision requires the immediate availability of the supervising physician or other practitioner, but the professional need not be present in the same room during the service. Immediate availability has been interpreted to mean in-person, physical availability (not virtual). During the COVID-19 PHE, CMS changed the definition of “direct supervision” as it pertains to the supervision of diagnostic tests, physicians’ services, and some hospital outpatient services to allow the supervising professional to be immediately available through virtual presence using real-time audio/video technology, instead of requiring their physical presence. In the 2021 MPFS final rule, CMS continued this policy through the end of the PHE for COVID-19 or December 31, 2021, whichever comes later.

In the 2022 MPFS proposed rule, CMS seeks information on whether this flexibility should be continued beyond the latter of the end of the PHE for COVID-19 or 2021. The Agency is specifically seeking input on whether this flexibility should potentially be made permanent, which would alter the definition of “direct supervision” to include immediate availability through the virtual presence of the supervising physician or practitioner using real-time, interactive audio/video communications technology. CMS is also seeking input on whether this policy change should be implemented without limitation after the PHE for COVID-19 or through a gradual sunset of the existing policy. Furthermore, the Agency is seeking comment on whether a revised policy should only apply to a subset of services, recognizing that it may be inappropriate to allow direct supervision without physician presence for some services, due to potential patient safety concerns.

**ASTRO believes that direct supervision is the proper standard for delivery of radiation therapy and supports its continued use through real-time, interactive audio and video technology for the duration of the PHE. However, we do not support continued use of real-time, interactive audio and video technology once the PHE has concluded. Due to the irreversible nature of radiation therapy, it is critical that practices provide direct supervision to ensure the continued delivery of safe and high-quality radiation therapy services. Ideally, this supervision is provided in-person and on-site by the radiation oncologist. While ASTRO believes that a board-certified/board-eligible Radiation**

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**Oncologist is the clinically appropriate physician to supervise radiation treatments, we recognize that some flexibility is necessary for those practices that deliver care to underserved populations who may experience access to care issues.**

## **2022 Quality Payment Program Proposed rule**

### **Merit-Based Incentive Payment System (MIPS)**

For the 2022 performance year, CMS proposes the following changes to the MIPS performance category weights:

- Quality – 30% (10% decrease from the 2021 performance year)
- Improvement Activities – 15% (no change)
- Promoting Interoperability – 25% (no change)
- Cost – 30% (10% increase from the 2021 performance year)

By law, the Cost and Quality performance categories must be equally weighted at 30% beginning in the 2022 performance period. Also, as required by law, beginning with the 2022 performance year, the performance threshold must be either the mean or median of the final scores for all MIPS eligible clinicians for a prior period. The Agency is proposing to use the mean final score from the 2017 performance year, which would result in the performance threshold being set at 75 points, and an additional performance threshold would be set at 89 points for exceptional performance. The Agency notes that the 2022 performance year is the final year for an additional performance threshold or additional MIPS adjustment for exceptional performance. **ASTRO urges CMS to extend the exceptional performance threshold past the 2022 performance year.** The exceptional bonus is one way for radiation oncology practices to succeed in the program since the cost for compliance is so high because of dedicated staff time, system upgrades, and data collection and reporting mechanism implementation.

### Performance Category Reweighting

CMS continues to provide Promoting Interoperability hardship exemptions for the 2022 performance period.

The Agency is proposing to no longer require an application for clinicians and small practices seeking to qualify for the small practice hardship exemption and reweighting. Instead, CMS is proposing to assign a weight of zero percent to the Promoting Interoperability performance category and redistribute its weight to another performance category (or categories) in the event no data is submitted for any of the measures for the Promoting Interoperability performance category. However, if data is submitted for a MIPS eligible clinician in a small practice, they would be scored on the Promoting Interoperability performance category like all other MIPS eligible clinicians. **ASTRO supports this proposal, believing that it will reduce administrative burdens for small practices.**

The Agency is seeking comment on potential options to increase small practice participation in the future. The major barrier to participation is the cost of updating technologies to ensure



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compliance. Eligible clinicians do not have control over the EHR products issued by vendors and there is little incentive for vendors to upgrade their products. Additionally, when vendors are required to upgrade their products for MIPS participants to maintain compliance with federal regulations, it requires significant investment in those products. The cost of these upgrades is then passed directly on to clinicians. These excess charges are a financial burden for small and rural practices since CMS does not reimburse for these upgrades. **CMS must provide additional incentives for vendors to make necessary upgrades and ensure that the cost is not passed down to clinicians.**

#### Facility-Based Measurement

CMS is proposing, beginning with the 2022 performance year, that for facility-based clinicians and groups, the MIPS Quality and Cost performance category scores will be based on the facility-based measurement scoring methodology unless a clinician or group receives a higher MIPS final score through another MIPS submission. The Agency would calculate two final scores for clinicians and groups who are facility based. One score would be based on the performance and weights of the performance categories if facility-based measurement did not apply. The other score would be based on the application of facility-based measurement. **ASTRO supports this proposal because it not only aligns with other MIPS policies where the higher score is the score that is used, but it accommodates the complex nature of physician contracting and business agreements.**

#### Bonus Points

##### *Complex Patients*

CMS is proposing to continue to double the complex patient bonus for the 2021 and 2022 performance period. Clinicians, groups, virtual groups and APM Entities would be able to earn up to 10 bonus points (instead of 5) to account for the additional complexity of treating their patient population due to COVID-19. These bonus points (capped at 10 points) would be added to the final score.

The Agency is also proposing to revise the complex patient bonus beginning with the 2022 performance year by:

- Limiting the bonus to clinicians who have a median or higher value for at least one of the two risk indicators (HCC and dual proportion).
- Updating the formula to standardize the distribution of two risk indicators so that the policy can target clinicians who have a higher share of socially and/or medically complex patients.
- Increasing the bonus to a maximum of 10 points.

**ASTRO supports the proposed changes to the complex patient bonus as we believe it will more accurately reflect the patient population being treated by radiation oncologists, and it will incentivize treating vulnerable populations due to the prevalence of more advanced stage disease and complex treatment requirements.**

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### Quality Performance Category

The Agency is proposing to extend the CMS Web Interface as a collection and submission type in traditional MIPS for registered groups and virtual groups, and APM Entities with 25 or more clinicians through the 2022 performance period, sunsetting it with the 2023 performance period. **ASTRO supports the extension of the CMS Web Interface, giving clinicians additional time to transition to other collection and submission types.**

CMS is proposing to maintain the data completeness threshold at 70% of Medicare Part B patients for the 2021 and 2022 performance years, regardless of payer, with a minimum of 20 cases per measure. CMS is also proposing to increase the data completeness threshold to 80% for the 2023 performance period. **ASTRO supports the proposal to maintain the data completeness threshold at 70% for the 2021 and 2022 performance years.** The proposal will help maintain stability within the program. **We are concerned, however, about the proposal to increase the data completeness threshold to 80% for the 2023 performance period. Moving to digital quality measures (dQMs) requires new processes for implementation, which take time. Clinicians should not have to worry about new and increased requirements for implementing those new processes.**

The Agency is proposing to remove the Oncology: Medical and Radiation – Plan of Care for Pain [NQF #0383, Q144] from the radiation oncology measure set. CMS believes that this measure does not align with the Meaningful Measures Initiative as it splits a clinical process into individual quality measures. The agency plans to maintain Oncology: Medical and Radiation – Pain Intensity Quantified [NQF #384, Q143]. CMS recognizes that Plan of Care for Pain does not quantify the completion of a plan of care but includes the assessment of pain for patients undergoing cancer treatment. Further, CMS believes that Plan of Care for Pain is limited to those patients that were screened positive for pain, whether screened for pain or being voluntarily verbalized by the patient. CMS believes, as a stand-alone measure, it is not a true reflection of the quality of care being given, but only reflects care to a subpopulation of oncology patients with documented pain. To truly ensure quality of care for these patients, CMS believes that clinicians should engage all denominator eligible patients and perform this assessment to identify the presence of pain in patients undergoing cancer treatment.

**ASTRO disagrees with the Agency’s proposal to remove the Oncology: Medical and Radiation – Plan of Care for Pain measure.** Ensuring that physicians are creating a plan of care for any pain is necessary. Patients with cancer can have multiple painful side effects and managing a patient’s pain is key to their quality of life. This, and its paired measure, Oncology: Pain Intensity Quantified – Medical Oncology and Radiation Oncology (NQF #143), have been utilized since the Physician Quality Reporting System (PQRS) was initiated and are reliable quality measures. Both measures are capturable by electronic systems and are meaningful to the holistic care of patients. **We recommend that CMS retain the Plan of Care for Pain measure in MIPS, not only to maintain harmonization across quality reporting programs but also to maintain continuity between the paired measures.**

Additionally, the Oncology: Plan of Care for Pain quality measure is included in the proposed Oncology Care First Model and the Radiation Oncology Model. ASTRO finds it difficult to

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understand why it is no longer feasible to implement a measure that has been in use for more than a decade in multiple programs and clinical settings. Removing the Plan of Care for Pain measure from MIPS means that it will not align with other reporting programs. Additionally, the National Quality Forum recently re-endorsed this measure, highlighting the importance of this measure from a pan-oncology panel and adding credence to the statements to its continuation.

#### *Measures without a Benchmark*

CMS is proposing to remove the 3-point floor for measures without a benchmark (except for small practices). These measures would receive 0 points, while small practices would continue to earn 3 points. This proposal would not apply to new measures in the first 2 performance periods available for reporting. **ASTRO opposes this proposal because it will disincentivize clinicians from reporting measures without a benchmark, while at the same time disincentivize measure stewards from developing new measures.** Further, we are concerned that even though this proposal would not apply to new measures in the first two performance periods, that will not be enough time for a measure to acquire enough data to be able to be benchmarked. **CMS continues to make measure development and implementation difficult with no clear rationale.**

#### *Measure Bonus Points and End-to-End Electronic Reporting Bonus Points*

CMS is proposing to remove bonus points for measures that meet end-to-end electronic reporting criteria. Additionally, the Agency is developing ways to encourage the use of CEHRT for electronic reporting without offering measure bonus points. As the program works to focus on the quality of care provided to beneficiaries, the Agency intends to score for performance on measures and not for reporting. Therefore, CMS is proposing to end measure bonus points for end-to-end electronic reporting beginning in the 2022 performance period. **Considering the transition to dQM reporting, ASTRO questions whether this proposal is counterintuitive given that dQMs incorporate new and additional data sources, thereby furthering interoperability. We believe that a bonus should be maintained during the transition to dQMs.**

#### *Quality Scoring for Groups Reporting Medicare Part B Claims Measures*

CMS recognizes that not all small practices that report Medicare Part B Claims measures intend to participate as a group. Therefore, the Agency is proposing to only calculate a group-level quality performance category score from Medicare Part B Claims measures if the small practice submitted data for another performance category as a group, thus indicating their intent to submit as a group. This proposal excludes those participating in MIPS as part of a virtual group because clinicians signal their intent to be scored as a virtual group through the virtual group election process. **ASTRO supports this proposal as it will alleviate confusion regarding group reporting.**

#### Cost Performance Category

CMS is proposing to increase the weight of the Cost category from 20% to 30% for the 2022 performance year. By law, the category must be weighted at 30% in the 2022 performance year. The Cost category continues to require a full calendar year reporting period.

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The Agency is proposing to add the following five newly developed episode-based cost measures beginning with the 2022 performance period: Melanoma Resection, Colon and Rectal Resection, Sepsis, Diabetes, and Asthma/Chronic Obstructive Pulmonary Disease (COPD). In addition to the current cost measure development process, the Agency is proposing a process of external cost measure development by stakeholders, and a call for cost measures beginning in CY2022 for earliest adoption into the MIPS program by the 2024 performance period. **ASTRO requests clarification on this proposal. Specifically, we are looking for clarification on whether stakeholders will have access to needed data; whether the new measures will be subject to a comment period before implementation; and, how CMS will support stakeholders in the development of these cost measures.**

### Improvement Activities Performance Category

#### *Suspension and Removal of Activities*

Currently, there is no existing policy to remove or suspend activities outside of the rulemaking process. The Agency is proposing that in the case of an improvement activity for which there is a reason to believe that the continued collection raises possible patient safety concerns or is obsolete, the improvement activity would be promptly suspended, and clinicians and the public would be notified through communication channels, such as listservs and web postings. The Agency would then propose to remove or modify the improvement activity as appropriate in the next rulemaking cycle. **ASTRO supports this proposal; however, we request clarification on what criteria the Agency would use to make these determinations.**

#### *Criteria for Nominating a New Improvement Activity*

CMS is proposing two new criteria for nominating new improvement activities:

- Improvement activities:
  - Should not duplicate other improvement activities in the Inventory.
  - Should drive improvements that go beyond standard clinical practice.

The Agency is also proposing that new improvement activities, must at minimum, meet the following criteria, including the two new criteria proposed above:

1. Relevance to an existing Improvement Activity subcategory (or a proposed new subcategory).
2. Importance of an activity toward achieving improved beneficiary health outcomes.
3. Feasible to implement, recognizing importance in minimizing burden, including, to the extent possible, for small practices, practices in rural areas, or in areas designated as geographic Health Professional Shortage Areas by the Health Resources and Services Administration.
4. Evidence supports that an activity has a high probability of contributing to improved beneficiary health outcomes.
5. Can be linked to existing and related MIPS Quality, Promoting Interoperability, and Cost Measures, as applicable and feasible.
6. CMS can validate the activity.



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The Agency is also proposing the following optional factors that they may use to consider nominated activities:

1. Alignment with patient-centered medical homes.
2. Support for the patient's family or personal caregiver.
3. Responds to a public health emergency as determined by the Secretary.
4. Addresses improvement in practice to reduce health care disparities.
5. Focus on meaningful actions from the person and family's point of view.
6. Representative of activities that multiple individual MIPS eligible clinicians or groups could perform (for example, primary care, specialty care).

**ASTRO supports the proposed criteria for improvement activities. We believe the new criteria will ensure high quality improvement activities.**

The Agency is proposing the addition of the following activities:

1. Achieving Health Equity:
  - a. Create and Implement an Anti-Racism Plan
  - b. Implement Food Insecurity and Nutrition Risk Identification and Treatment Protocols
2. Behavioral and Mental Health
  - a. Implementation of a Trauma-Informed Care (TIC) Approach to Clinical Practice
  - b. Promoting Clinician Well-Being
3. Emergency Response and Preparedness
  - a. Implementation of a Personal Protective Equipment (PPE) Plan
  - b. Implementation of a Laboratory Preparedness Plan
4. Patient Safety and Practice Assessment
  - a. Application of CDC's Training for Healthcare Providers on Lyme Disease

**ASTRO supports the addition of the proposed improvement activities.**

#### Promoting Interoperability (PI) Performance Category

CMS is proposing to apply automatic reweighting to clinical social workers and small practices beginning with the 2022 performance period. **ASTRO supports the automatic reweighting of the Promoting Interoperability performance category for clinical social workers and small practices.**

The Agency is proposing a new measure where MIPS eligible clinicians must attest to conducting an annual assessment of the High Priority Guide of the Safety Assurance Factors for EHR Resilience Guides (SAFER Guides). This measure would be required, but not scored, and would not affect the total number of points earned for the Promoting Interoperability performance category. **ASTRO supports the addition of this new measure and agrees with the Agency's proposal not to score this measure during implementation.**

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Advancing to Digital Quality Measurement and the Use of Fast Healthcare Interoperability Resources (FHIR) in Physician Quality Programs and Additional Objectives Adopting FHIR-based API Standards Requests for Information

The Agency is soliciting comments on the transition to digital quality measurement and on its intention to align additional Promoting Interoperability performance category objectives with approaches utilizing HL7 FHIR standard Release 4-based API functionality, specifically targeting the Health Information Exchange, as well as the Public Health and Clinical Data Exchange objectives in the Promoting Interoperability performance category. **ASTRO supports the use of FHIR and FHIR-based APIs and commends the Agency for promoting one standard for everyone to work toward.**

The availability and use of data standards is key to interoperability, data transparency and liquidity. ASTRO is currently engaged in the Common Oncology Data Elements eXtension (CodeX) FHIR Accelerator and has recently completed work to standardize data elements necessary in the end of treatment summary, which promotes care coordination between the numerous clinicians required for holistic cancer treatment. Prior to this initiative, limited standards existed, outside of Digital Imaging and Communications in Medicine (DICOM), that could transfer data between non-radiation oncology systems. To date, the CodeX project has created four radiation therapy profiles, six extensions, and nine value sets, resulting in 322 new radiation oncology-specific data elements. These concepts have not only been added into the Minimal Coding Oncology Data Elements (mCODE) standard, but also have been approved for new Systemized Nomenclature of Medicine-Clinical Terms (SNOMED CT) codes.

Standards development and the framework for information transfer is vital in the move to value-based care; however, it is costly. **ASTRO recommends that CMS provide funding for the transition to provider FHIR-based APIs.** The infrastructure needed for this transition does not exist and must be developed. If CMS expects practices to have one, it will require significant resources (both financial, and staff time) to implement. Currently these tools do not exist so development time must be taken into consideration. Oncology vendors are just now looking into API solutions for their customers, despite the approaching timelines presented in the ONC and CMS Interoperability rules.

Utilizing this growing framework for data, measure stewards will need time and resources to test any re-specification needed to support the transition to dQM using FHIR, and new standards will need to be developed. Quality measure development and maintenance are costly and burdensome, and there is no reason to believe that dQMs will be cheaper to develop and test.

Closing the Health Equity Gap in CMS Clinician Quality Programs Request for Information

CMS is requesting information on revising several related CMS programs to make reporting of health disparities based on social risk factors, and race and ethnicity more comprehensive and actionable for hospitals, providers, and patients.

For purposes of the 2022 QPP proposed rule, CMS is using the definition of equity established in Executive Order 13985, issued on January 25, 2021, “the consistent and systematic fair, just, and

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impartial treatment of all individuals, including individuals who belong to underserved communities that have been denied such treatment, such as Black, Latino, and Indigenous and Native American persons, Asian Americans and Pacific Islanders and other persons of color; members of religious minorities; lesbian, gay, bisexual, transgender, and queer (LGBTQ+) persons; persons with disabilities; persons who live in rural areas; and persons otherwise adversely affected by persistent poverty or inequality.”

The CMS Equity Plan for Improving Quality in Medicare focuses on three core priority areas, which inform Agency policies and programs: 1) Increasing understanding and awareness of health disparities; 2) developing and disseminating solutions to achieve health equity; and 3) implementing sustainable actions to achieve health equity.

In the 2022 QPP proposed rule, CMS is seeking comment on two potential future expansions of the CMS Disparity Methods, including 1) stratification of quality measure results by race and ethnicity, and 2) improving demographic data collection.

**ASTRO supports the stratification of quality measures results by race and ethnicity, but also encourages CMS to consider stratification by patient residency in rural versus urban locations.** These indicators lend themselves to demonstrating whether a hospital or other healthcare settings may provide healthcare services to an underserved population that is at higher risk for experiencing healthcare disparities.

As for the collection of additional demographic data, the collection of a minimum set of demographic data elements such as race, ethnicity, sex, sexual orientation, gender identity, primary language, tribal membership, and disability status can be valuable to better understanding the patient population served. However, these indicators can be further enhanced through the collection of additional data points such as employment status, education level, insurance status, income level, and distance from provider, which may further inform whether a patient needs additional social and financial supports to ensure they are able to initiate and complete care. Distance is a critical determinant in whether a patient will start and complete their radiation treatments.

The collection of demographic data and stratification of quality measures can be used to better understand quality measures performance across different patient populations. It will allow for more granular analysis to determine whether interventions that are in place to improve quality are successful for some populations but not for others. Thus, informing the need for modifications or changes to quality measures metrics that can be designed to truly drive quality improvement across all patient populations.

Additionally, this data could be used to establish a Hospital Equity Score, but why stop there? Hospital Equity Scores can synthesize reported metrics to better inform decision making for addressing healthcare disparities, but it could be taken one step further and applied to patients seeking care in these facilities by ensuring that they have access to the social and financial supports necessary to access and complete medical treatment. **ASTRO supports the concept of developing beneficiary-specific equity scores that are established to identify those patient**

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**populations that require wrap around services, such as nutritional counseling, access to healthy food, transportation and housing.** A health equity score can then be further used to tie community need to additional reimbursement that supports the delivery of specific services that are supportive of patients who experience health inequities.

**While ASTRO is supportive of efforts to collect better data points for informing improved patient care and outcomes, we continue to urge the Agency to consider the burden—on practices and patients—associated with collecting this data.** Not only are time and money needed to upgrade software and implement new programming, but also hospitals and other healthcare settings will require staff to collect data and manage the related programming. **CMS cannot meaningfully address the healthcare equity gap without investing in the resources and infrastructure necessary to reach our nation’s most vulnerable populations.**

Many physicians are frustrated with the existing Certified Electronic Health Records Technology (CEHRT) requirements associated with the Promoting Interoperability programs. Clinicians do not have any control over the electronic health records (EHR) products issued by vendors, yet they are penalized for not achieving CEHRT status. More data submission requirements need a stronger reporting framework, more commonly applied standards, and changes to workflow, for which there is currently no funding. **CMS must provide funding assistance for these upgrades.** Additionally, these changes cannot be made overnight, they take time to implement. For example, the Cures Update Edition is set for 2023, yet only Cerner has made adequate upgrades to meet these new requirements. CMS needs to provide adequate time for vendors to prepare and implement upgrade requirements.

Additionally, vendors must be held accountable for the upgrades required to CEHRT systems to ensure improved care coordination and patient access. Hospitals and physicians should not shoulder the burden of meeting these requirements nor should they bear the cost associated with system upgrades. As previously stated, CMS needs to invest in the technological and social resources necessary to improve patient care across all populations. As COVID-19 has demonstrated, a “one-size-fits-all” approach has left many Americans behind. Therefore, the way to achieve health equity will be to target high risk populations with the social support and resources necessary to ensure they are able to achieve better health outcomes.

#### COVID-19 Vaccination by Clinicians Measure Request for Information

The Agency is seeking feedback on including the COVID-19 Vaccination Coverage Among Healthcare Personnel measure in MIPS. CMS believes it is important to assess whether clinicians are taking steps to limit the spread of COVID-19, and to help sustain the ability of U.S. hospitals to continue serving their communities throughout the COVID-19 PHE and beyond. **ASTRO supports the adoption of the COVID-19 Vaccination Coverage Among Healthcare Personnel measure.** The entire radiation oncology treatment team, not just physicians, have daily contact with patients over the course of treatment, which can last several weeks, and measuring vaccination status protects both patients and practice staff.



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#### Clinical Notes Request for Information

The Agency is soliciting stakeholder feedback on changes it can make that will ensure that clinical notes are widely available to patients. **ASTRO urges caution with ensuring that clinical notes are widely available to patients, as inadvertent disclosure of a diagnosis could occur before a clinician has had a chance to discuss with a patient, causing anxiety and worry.**

#### Request for Information on a Patient Access Outcomes Measures

The Agency is seeking comments surrounding changes to the Promoting Interoperability performance category and related efforts, which could better target patient access outcomes related to the use of patient portals or third-party applications. The Promoting Interoperability performance category addresses patient access to key healthcare data as part of an overarching interoperability landscape. However, vital elements of data sharing are still in development and the Promoting Interoperability performance category should stay focused on these connectivity issues. Similar to previous comment letters stating that clinicians should not be held accountable for the functionality of a vendor's system, **ASTRO believes that clinicians also cannot be held accountable for patient awareness or engagement with electronic health data.** ASTRO supports the alignment of the performance category requirements with the Cures Act and USCDI requirements, but believes that these structures need to be developed, implemented, and tested before any additional patient-facing requirements are included. As stated above, ASTRO urges caution with clinical notes to avoid early disclosure of diagnosis or any other relevant information that might cause undue stress to a patient in the absence of a clinician.

#### **MIPS Value Pathways (MVP)**

CMS is proposing to further delay the implementation of MVP until the 2023 performance period. CMS believes this delay will provide practices the time they need to review requirements, update workflows, and prepare their systems as needed to report MVP. **ASTRO supports the delayed implementation of MVP, and we urge CMS to delay the implementation even further.** In addition to the challenges clinicians are still facing regarding the COVID-19 PHE, there has been little guidance regarding the development of MVP, and we believe it is unreasonable to expect specialties and other stakeholders to develop and be ready to implement MVP by 2025. Further, we think it is ambitious of CMS to believe that traditional MIPS can sunset by 2027 given the uncertain and murky guidance given regarding development of MVP to date.

#### Subgroups

The Agency is proposing to limit subgroup reporting only to clinicians reporting through MVP or APM Performance Pathway (APP) for the first year of subgroup implementation. Subgroup reporting would be voluntary for the 2023 and 2024 performance years. CMS defines subgroups as “a subset of a group which contains at least one MIPS eligible clinician and is identified by a combination of the group TIN, the subgroup identifier, and each eligible clinician's NPI.”

ASTRO questions the proposal limiting subgroup reporting to just MVP reporting. **We believe subgroup reporting should be available to all MIPS participants and recommends CMS include this option for MIPS participants.** ASTRO believes that the inclusion of subgroups

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**will be good for physician choice; however, we worry about the additional layers of complexity that would be added if the proposal is finalized.**

To participate as a subgroup, each subgroup would be required to:

- Identify the MVP the subgroup will report, along with one population health measure included in the MVP and any outcomes-based administrative claims measure on which the subgroup intends to be scored, if available.
- Identify the clinicians in the subgroup by TIN/NPI.
- Provide a plain language name for the subgroup for purposes of public reporting.

Once registered, the subgroup would be assigned a unique subgroup identifier that would be separate from the individual NPI identifier, the group TIN identifier, and the MVP identifier.

#### Participation Options

CMS is proposing the following in the definition of an MVP Participant: individual clinicians, single specialty groups, multispecialty groups, subgroups, and APM Entities. Beginning with the 2025 performance year, the Agency is proposing that multispecialty groups would be required to form subgroups to report MVP. CMS did not indicate whether all specialties will have their own MVP, or how this will be operationalized. Nor did CMS indicate if subgroups must be made up of a single specialty. If, in fact, a subgroup can be made up of multiple specialties, then we question why CMS is requiring multispecialty groups to form subgroups for MVP reporting.

**ASTRO requests clarification on this requirement. Further, ASTRO believes that requiring multispecialty groups to form subgroups by 2025 is an overly ambitious proposal.** The Agency's rationale is that this will give multispecialty groups time to become familiar with MVP; however, it is likely that subgroups within multispecialty groups will not have MVP by 2025. Additionally, multispecialty groups will have to develop the infrastructure, hire additional staff, and make necessary practice changes to support multiple submission types, all of which will take time. Given the proposed transition time, CMS must provide additional guidance so these practices and groups can begin the transition process. **ASTRO requests clarification on the following:**

- Does CMS anticipate all specialties having an MVP to report to by 2025?
- Will CMS be developing MVP or is the Agency leaving it up to specialties and other stakeholders?
- Does CMS expect development of overlapping MVP? If an MVP can be patient-, disease-, or specialty-focused, how does this decrease the options and increase comparability?
- Will there be a "generic" MVP for those specialties who do not have a specialty-specific MVP?
- Do single-specialty practices or groups have to report MVP? If CMS plans to transition these groups to MVP, when do they expect that to occur?

#### Reporting Requirements

CMS is proposing the following reporting requirements for MVP Participants and Subgroups:

Medicare Program; CY 2022 Payment Policies under the Physician Fee Schedule and Other Changes to Part B Payment Policies; etc.

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- Foundational Layer (MVP agnostic)
  - Population Health Measures: MVP Participants and Subgroups would select one population health measure, the results of which would be added to the quality score.
  - Promoting Interoperability Performance Category:
    - MVP Participants would report on the same Promoting Interoperability measures required under traditional MIPS, unless they qualified for automatic reweighting or had an approved hardship exemption.
    - Subgroups submit Promoting Interoperability data at the group level, not the subgroup level
- Quality Performance Category
  - MVP Participant scoring policies would align with those used in traditional MIPS.
  - Subgroups would select four quality measures. One must be an outcome measure (or a high-priority measure if an outcome measure is not available or applicable).
- Improvement Activities Performance Category
  - MVP Participants would select four quality measures. One must be an outcome measure (or a high-priority measure if an outcome measure is not available or applicable).
  - Subgroups would select two medium-weighted improvement activities or one high-weighted improvement activity available for the MVP.
- Cost Performance Category
  - CMS would calculate performance exclusively on the cost measures that are included in the MVP using administrative claims data.

**ASTRO supports the proposal that subgroups would report the Promoting Interoperability at the group level, not the subgroup level. We remain concerned about the inclusion of population health measures, as few exist and even fewer are relevant to specialties. How will this requirement be modified in the case where no population health measure exists?**

### **Alternative Payment Models (APM)**

#### **Advanced APM**

##### Advanced APM Incentive Payment

In the 2022 MPFS proposed rule, CMS is proposing a change to the APM Incentive Payment payee hierarchy that was established in 2021. This modification will allow CMS to expand its search at each step of the hierarchy, identifying potential payee TINs that are associated with the QP during the QP payment year. This proposed approach enables the Agency to make payments earlier in the year and reduces the number of QP NPIs that do not match with a payee TIN. Overall, this would reduce CMS' reliance on the public notice process to request more information. **ASTRO appreciates CMS' commitment to correctly identifying and paying earned bonuses to Advanced APM participants. We support the proposed modifications to**

Medicare Program; CY 2022 Payment Policies under the Physician Fee Schedule and Other Changes to Part B Payment Policies; etc.

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**the existing payee hierarchy that will allow CMS to expediate payee identification and payment.**

Alternative Payment Model Performance Pathway (APP)

In 2021, CMS established the Alternative Payment Model Performance Pathway (APP) under the MIPS program. The APP allows for the reporting of a single quality measure set with broad applicability. The APP establishes measures, which according to CMS address the highest priorities for quality measurement and improvement, while also reducing reporting burden, promoting alignment of measures and consolidation of reporting requirements across CMS programs. In the 2022 MPFS proposed rule, CMS recognizes that when the APP program was established in the 2021 MPFS final rule, it did not discuss how the other category weights would change given that APP participants are already meeting cost category requirements. The Agency sets forth proposed weighting modifications but does not address concerns that the APP has limited application and is not broadly applicable to unique specialties of care. **While ASTRO supports efforts to establish new pathways for participating in Alternative Payment Models, the APP seems to be designed more for primary care providers than specialty providers, based on the broad range of standardized quality measures. We urge CMS to further consider model development in collaboration with a variety of stakeholder groups.**

Thank you for the opportunity to comment on this proposed rule. We look forward to continued dialogue with CMS officials. Should you have any questions on the items addressed in this comment letter, please contact Adam Greathouse, Senior Manager, Health Policy, at (703) 839-7376 or [Adam.Greathouse@astro.org](mailto:Adam.Greathouse@astro.org).

Respectfully,



Laura I. Thevenot  
Chief Executive Officer





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Chiquita Brooks-LaSure  
Administrator  
Centers for Medicare & Medicaid Services  
Department of Health and Human Services  
Attention: CMS-1751-P  
Mail Stop C4-26-05  
7500 Security Boulevard  
Baltimore, Maryland 21244-1850

*Submitted electronically via regulations.gov*

Re: Medicare Program; CY 2022 Payment Policies under the Physician Fee Schedule and Other Changes to Part B Payment Policies; Medicare Shared Savings Program Requirements; Provider Enrollment Regulation Updates; Provider and Supplier Prepayment and Post-Payment Medical Review Requirements

Dear Administrator Brooks-LaSure,

The American Academy of Dermatology Association (AADA) represents more than 16,500 dermatologists nationwide. We are writing to provide comments on the Centers for Medicare and Medicaid Services (CMS) proposed rule *CY 2022 Payment Policies under the Physician Fee Schedule and Other Changes to Part B Payment Policies*. The AADA is committed to excellence in the medical and surgical treatment of skin disease; advocating for high standards in clinical practice, education, and research in dermatology and dermatopathology; and driving continuous improvement in patient care and outcomes while reducing the burden of disease. We appreciate the opportunity to provide comments on the proposed rule on the Physician Fee Schedule and Quality Payment Program, as well as the Health Equity Request for Information. The AADA urges CMS to take these recommendations and concerns into consideration when developing the final rule and formulating future policy.

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**PHYSICIAN FEE SCHEDULE****Changes in Relative Value Unit (RVU) Impacts**

CMS has calculated that the RVU Conversion Factor (CF) will be reduced by 3.75%, from \$34.8931 in 2021 to \$33.5848 in 2022<sup>1</sup>. The CMS proposed conversion factor includes the budget neutrality adjustment from the 2021 implementation of improved payments to Evaluation and Management (E/M) Office Visits as well as the requirement under the Medicare Access and CHIP Reauthorization Act (MACRA), that the statutory physician payment update for CY 2022 is zero percent.

We acknowledge that CMS normally must adhere to the budget neutrality requirement when establishing the CF. It is important for CMS to consider that in addition to the conversion factor reduction, in 2022 physicians will be facing the end of the moratorium on Medicare sequestration plus the statutory sequestration cuts mandated by PAYGO – the pay-as-you-go legislation of March 2021. Simply put, the conversion factor for 2021 was already reduced by 3.1% from 2020, and now a further, 3.75% reduction for 2022, along with a looming reinstatement of an additional 2% sequestration are slated. While these looming payment cuts require Congressional action, they add to the financial squeeze on physician practices. Furthermore, these are not normal times. Our country continues to face a Public Health Emergency (PHE) due to COVID-19, extended in part by the Delta variant. Medical practices continue to face enormous financial challenges and uncertainty, with increased expenses for office redesign and personal protective equipment, along with decreased revenue because the number of patient encounters must be reduced for the safety of patients and staff. ***CMS must not inflict further economic devastation on the medical community by drastically cutting payments for services. CMS should extend the budget neutrality payment adjustment of 3.75% to maintain the value of the CF at the same level in 2022 as it was in 2021, \$34.8931.***

**Practice Expense: Clinical Labor Pricing Updates**

CMS proposes to update the clinical labor pricing for CY 2022, in conjunction with the final year of the supply and equipment pricing update. Since 2019, CMS has been updating the supply and equipment prices used for practice expense (PE) as part of a market-based pricing transition; CY 2022 will be the final year of this 4-year transition. CMS is soliciting comments about clinical labor pricing they are particularly interested in getting additional wage data for the clinical labor types for which they lacked direct BLS wage data and made use of proxy labor categories for pricing. Since the clinical labor price update is done in a budget neutral fashion, it affected the values of supply and equipment portion of the PE negatively. ***We appreciate CMS wanting to base the practice expense RVUs based on current values. The AADA recommends that CMS implement a 4-year transition period for the clinical labor price update, as it did for the supply and equipment prices since it significantly affects the payment rates.***

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<sup>1</sup> 86 FR 39529

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**Telehealth and Other Services Involving Communications Technology**

CMS proposed to end payment for audio-only telehealth visits at the end of the public health emergency for all services except mental health services. CMS proposed to retain all services added to the Medicare telehealth services list on a Category 3 basis until the end of CY 2023. These services will be removed from the Medicare telehealth services list as of the date that the PHE for COVID-19 ends. Included in this list are 99441, 99442 and 99943 - Telephone evaluation and management service. CMS is proposing to permanently adopt coding and payment for CY 2022 of virtual check-ins, HCPCS code G2252 (Brief communication technology-based service, e.g., virtual check-in service). There are occasions when a longer virtual check-in may be needed. ***The AADA supports development of coding and payment for this service. We recommend that the coding is developed through the CPT process and that the RUC develop valuation recommendations.***

In 2021, CMS created new G codes (G20X0 and G20X2) to capture store and forward telehealth and virtual check ins when performed by non-physician practitioners who cannot bill independently for E/M services, and proposes to value them the same as G2010 and G2012 (the codes physicians use for store and forward and virtual check-ins). ***The AADA appreciates CMS' effort to make the store and forward as a reimbursable telemedicine option for providers and supports the new proposed codes and values.*** Store-and-forward is a useful modality for teleconsultation and tele-triage when coordinating care for patients. It also has the potential to be used for follow-up care for established patients.

**Scope of Practice**

CMS is proposing to allow physician assistants (PAs) to bill the Medicare program and be paid directly for their work effective January 1, 2022. This is consistent with the rules for nurse practitioners. PAs would also be allowed to reassign their rights to payment for their services and may choose to incorporate as a group comprised solely of practitioners in their specialty and bill the Medicare program, in the same way that NPs and CNSs may do. While CMS is required to make this change under section 403 of the Consolidated Appropriations Act of 2021, we share the following perspective and concerns:

**Qualifications of a Board-Certified Dermatologist**

A dermatologist is a licensed medical doctor and the only residency- trained physician specialist fully educated in the science and art of cutaneous medicine and surgery. Dermatologists treat the medical, surgical, pathologic and aesthetic conditions of the skin, hair, nails, and mucous membranes. A dermatologist has extensive knowledge and expertise in cutaneous medicine, surgery, and pathology. (AAD Position Statement on The Practice of Dermatology: Protecting and Preserving Patient Safety and Quality Care). Board-certified dermatologists complete 8 years of medical education and training, which includes four years of medical school after college, culminated in a medical degree, undergo a 1 year internship, train for a minimum of 3 years in an Accreditation Council for Graduate Medical Education accredited dermatology residency, followed by passing a rigorous a Board certification examination through the American Board of Dermatology, and some go on to complete an additional 1 to 2 year fellowship training in a subspecialty.

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Board-certified dermatologists are required to provide 12,000 – 16,000 hours of patient care as a condition for board certification before they can practice independently. By contrast, physician assistants obtain a master's degree in approximately 27 months after college, are only required to provide 2,000 hours of patient care, and have no internship or residency. Similarly, the training of nurse practitioners is limited to 2-4 years of post-baccalaureate education, provides only 500- 700 hours of patient care, and has no internship or residency. A dermatologist's educational path is uniform nationwide. Dermatologists are required to pass a series of three comprehensive national standardized examinations prior to licensure. By contrast nurse practitioners must pass a single test consisting of 150-200 multiple choice questions. Similarly, physician assistants must pass a single 300 question multiple choice exam. These exams generally cover all of medicine, compared to the dermatology specific board exam required for board-certified dermatologists.

We urge CMS to consider the conclusion of the Physician Assistant Education Association (PAEA), which represents physician assistant programs and primary faculty. The PAEA surveyed physician assistant educators, including program directors, past presidents, and medical directors, about independent physician assistant practice. Most concluded that the current physician assistant school curriculum does not adequately prepare physician assistants to practice without physician supervision, collaboration, or oversight.<sup>2</sup>

As we explain further below, the delivery of dermatologic care by a non-dermatologist or unsupervised nonphysician personnel is limited and may result in a higher incidence of adverse events, complications, or suboptimal results. (AAD Position Statement on The Practice of Dermatology: Protecting and Preserving Patient Safety and Quality Care) The skills and expertise of a PA or NP are not interchangeable with those of a board-certified dermatologist.

### **The Value of Board Certified Dermatologists in the Overall Cost and Quality of Care**

Direct access to dermatologists is the easiest and most cost-effective<sup>3</sup> method of providing quality dermatologic services. Studies have indicated that dermatologists are more cost-effective and provide higher quality of care to patients with skin diseases. Improper diagnosis of skin diseases results in: additional costs from unnecessary diagnostic tests, office visits or treatments; possible complications from unnecessary treatments; and prolonged patient suffering. Patients experience loss of income and productivity from missed work due to misdiagnosis. There may even be increased morbidity and potential mortality from delayed diagnosis and treatment. (AAD Position Statement on Access to Specialty Care and Direct Access to Dermatologic Care) There is evidence that less trained individuals injure patients more frequently, perform more unnecessary procedures, and order more unnecessary tests. (AAD Position Statement on Formally Trained Dermatologists Are Better Qualified) Therefore, it is

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<sup>2</sup> PAEA. Optimal Team Practice: The Right Prescription for New PA Graduates? Available at [http://paeonline.org/wp-content/uploads/2017/05/PAEA-OTP-Task-ForceReport\\_2017\\_2.pdf](http://paeonline.org/wp-content/uploads/2017/05/PAEA-OTP-Task-ForceReport_2017_2.pdf)

<sup>3</sup> Although skin cancer incidence is rising, there is varied biopsy accuracy between dermatologists and advanced practice professionals (APPs). Ferris et al examined more than 33,000 patient encounters and revealed the NNB for physician assistants was statistically significantly higher for all skin cancer and melanoma. Additionally, patients seen by a physician assistant were significantly less likely to be diagnosed with melanoma in situ. JAMA Dermatol. 2018 May; 154(5): 569–573.



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critical that every Medicare beneficiary have direct access to dermatologic services delivered by a board-certified dermatologist.

**Physician Led Team Care Must be Preserved: As the Practice of Dermatology is Complex, Delegation and Supervision Must be Maintained**

The practice of dermatology includes, but is not limited to, diagnosis, treatment, or correction of human conditions, ailments, diseases, injuries, or infirmities of the skin, hair, nails and mucous membranes, by any medical, surgical, pathologic or aesthetic means, medications, methods, devices, or instruments. These conditions may be primary cutaneous ailments or part of a systemic disease. The practice of dermatology includes, but is not limited to, performing any medical, surgical, or aesthetic act or procedure that can alter or cause biologic change or damage to the skin and subcutaneous tissue. Any procedure using any approved device that can alter or cause biologic change or tissue damage, should be performed only by an appropriately trained physician or non-physician under the direct, on-site supervision of an appropriately trained physician. (AAD Position Statement on The Practice of Dermatology: Protecting and Preserving Patient Safety and Quality Care)

A dermatologist is ultimately responsible for the care and safety of patients in his or her practice and is responsible for the training and continuing education of all providers under his or her supervision. Under the direction of a board-certified dermatologist, the practice of dermatology benefits from a collaborative care team approach and may include other providers practicing in a dermatologic setting, including but not limited to: non-physician clinicians, such as licensed physician assistants and nurse practitioners; allied health professionals; licensed personnel; and other personnel. The board-certified dermatologist retains ultimate responsibility for patient care and tasks delegated to care team members must be within the scope of practice of the board-certified dermatologist. The dermatologist also remains responsible for ensuring that all delegated activities are within the scope of each care team member's training and level of experience. (AAD Position Statement on The Practice of Dermatology: Protecting and Preserving Patient Safety and Quality Care)

The optimum degree of dermatologic care is delivered when a board-certified dermatologist, as defined here, provides direct, on-site supervision to all non-dermatologist personnel. When practicing in a dermatological setting, non-dermatologist physicians and non-physician clinicians, such as nurse practitioners and physician assistants, should be directly supervised by a board-certified dermatologist, commensurate with the level of supervision defined by the state board of medical examiners or other appropriate state board/agency of the state in which they practice and taking into consideration the training and degree of experience of the non-physician clinician. The efficient utilization of a non-physician clinician may, at times, involve off-site supervision. The supervising dermatologist or a designated alternate dermatologist must be available in person or by electronic communication at all times when the non-physician clinician is caring for patients. For those instances when a dermatologist is not available on site, there should be written protocols outlining how a patient is to be seen by a non-physician clinician and under what circumstances these patients should be presented to the supervising dermatologist, who is always available either in person or by electronic means.

There are more than 3,000 dermatologic diseases, and only Board-certified dermatologists have the education, training, and expertise to render an accurate diagnosis and develop a plan of care for

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dermatology patients. Licensed allied health professionals, including but not limited to registered nurses and licensed practical nurses, when practicing in a dermatological setting, should only provide care after a patient receives an initial evaluation, diagnosis, and treatment plan from a dermatologist. (AAD Position Statement on The Practice of Dermatology: Protecting and Preserving Patient Safety and Quality Care)

***For these reasons, we strongly urge CMS to conduct a thorough review of the education and training of nonphysician health care professionals and the impact on the overall cost and quality of care of care. We also urge CMS to carefully review the true impact of state scope of practice laws on access to care across the country.***

### **Evaluation and Management (E/M) Services**

CMS proposes to define a split (or shared) visit as an E/M visit in the facility setting, for which “incident to” payment is not available, and that is performed in part by both a physician and a non-physician practitioner (NPP). Only the physician or NPP who performs the substantive portion of the split (or shared) visit would bill for the visit. CMS proposes to define substantive portion as more than half of the total time spent by the physician and NPP. CMS also proposes to modify its existing policy to allow either physicians or NPPs to bill for split (or shared) visits for both new and established patients, and for critical care and certain Skilled Nursing Facility/Nursing Facility (SNF/NF) E/M visits. CMS also notes that Medicare does not pay for partial E/M visits. CMS proposes that a modifier be utilized to designate these split (or shared) visits in claims data.

CMS proposes to adopt the CPT prefatory language for critical care services as currently described in the CPT Guidelines. CMS further proposes to prohibit a practitioner that reports critical care services furnished to a patient from also reporting any other E/M visit for the same patient on the same calendar day that the critical care services are furnished to that patient and vice versa. Additionally, CMS would prohibit billing critical care visits during the same time as a procedure with a global surgical period.

When a resident participates in the provision of patient care, the teaching physician can bill for the service if they are present for the key portion of the services. CMS proposes that when total time is used to determine the office/outpatient E/M visit level, only the time that the teaching physician was present can be included. CMS' rationale is that it makes separate payment for the resident's work through Medicare Part A payment for graduate medical training programs. ***The AADA supports these changes. However, CMS' proposal failed to include increases to the value of E/M post-operative services in the 10- and 90-day global codes. CMS should adjust the values of the E/M post-operative visits included in the global codes to reflect the 2021 updates to the office/outpatient E/M codes payment increases.***

### **Provider Enrollment**

To protect the Medicare program against risks and prevent incidents of fraud, waste and abuse, CMS is proposing further regulatory revisions to their existing provider enrollment regulations, including expanding categories of parties within the purview of denial and revocation provisions, which would exclude administrative/management services personnel who furnish services payable by a federal health

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care program. Based on the exclusion authority of the Office of Inspector General for the Department of Health and Human Services (OIG), CMS proposes to expand its oversight and enforcement of categories of parties affiliated with a provider/supplier. The expanded class would permit CMS to deny or revoke not only a provider/supplier from the Medicare program, but would now include any affiliate—owner, managing employee or agent—by following the chain of command, either up or down where and when it is determined in cases involving suspect fraudulent or abusive practices. This chain-of-command proposed change aligns with existing OIG guidance about providers/suppliers not employing excluded persons to provide management or administrative services that are payable by a federal health care program. CMS reasons that such individuals can impact a provider's/supplier's operations that can harm the Medicare program. For example, an individual in a lower-level administrative position (billing specialist, accountant, or human resources specialist.) could undertake fraudulent activity to the same extent (and with consequences as severe) as a high-ranking officer. For program integrity purposes, the central issue is not the specific individual who engaged in the abusive conduct, but the conduct itself. ***The AADA supports the importance of protecting the Medicare Trust Fund from fraud and abuse. It is appropriate for this protection to begin with robust Medicare provider enrollment policies designed to block all bad actors from participating in the program, including any affiliates such as non-clinical staff. The AADA supports this change to provider enrollment.***

## QUALITY PAYMENT PROGRAM (QPP)

**MIPS Scoring**

CMS estimates approximately 809,625 clinicians will be MIPS eligible in 2022. Due to the expiration of the MIPS transition policies and CMS proposals to fully implement the program as required by statute, CMS estimates the overall proportion of clinicians who will avoid a MIPS penalty and/or earn an incentive payment decreases from 91.7 percent to 67.5 percent. The mean final score would be 75.86 and the median would be 80.30. The maximum positive payment adjustment, including the exceptional bonus, is estimated to be 14 percent, while the maximum penalty is 9 percent. Under statute, the 2022 performance period is the last year that an exceptional performance bonus from a \$500 million pool that is not tied to budget neutrality is available. Payment adjustments stemming from the 2022 performance period will be applied to 2024 Medicare payments.

CMS proposes to increase the 2022 MIPS performance threshold to 75 points from 60 points. CMS is statutorily required to hold the performance threshold at either the mean or median of the final scores for all MIPS eligible clinicians for a prior period, beginning with the 2022 performance year. CMS has based the new threshold on the mean final score from the 2017 performance period/2019 MIPS payment year. Clinicians must achieve the threshold to avoid a payment penalty. Additionally, CMS proposes increasing the exceptional performance threshold to 89 points from the current 85 points. ***The AADA is concerned that it will be quite difficult for physicians to meet CMS' proposed minimum point threshold. This 15-point increase is significant, and physicians who don't meet the threshold will be penalized. The penalty would compound the burdens physician practices have faced with the COVID-19 public health emergency. While the increase for exceptional performance is less steep,***

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***the gap continues to widen with each jump not allowing providers to be able to achieve these goals. The AADA urges CMS to maintain the MIPS threshold scores close to the 2021 thresholds as possible.***

With regard to the Quality Performance Category, CMS proposes to reduce its weight from 40 percent to 30 percent of the final MIPS score in 2022 and beyond and to increase the weight of Cost Category from 20% to 30%. While these are statutorily mandated, there are significant concerns about these changes. Although it is excellent progress that there will be the new melanoma resection cost measure available for dermatologists, the majority of dermatologists will rely heavily on quality measures to comprise the majority of their MIPS score. Therefore, reducing the weight of the quality performance category will make it increasingly difficult for them to acquire enough points through other categories to avoid the 9% penalty. Furthermore, the impact of the ongoing PHE has contributed to practices' increases in costs and resource utilization. ***The AADA is concerned about the impact on physician practices of decreasing the weight of the quality performance category and increasing the cost category weight, particularly during the PHE. For this reason, the AADA urges CMS to delay the reweighting of these categories until 2023.***

Also, CMS proposes to modify the scoring of class 2 quality performance measures for the 2022 performance period/2024 MIPS payment year. CMS would eliminate the 3 point scoring for class 2 measures- which are measures that meet the data completeness requirement but do not have a benchmark or do not meet the case minimum, due to fewer than 20 individual physicians or groups reporting the measure. However, CMS would maintain this 3-point floor for small practices. CMS' rationale is that in preparation for MVP, it should now eliminate any transitional policy, which includes the 3 point scoring for class 2 measures. ***The AADA urges CMS to wait to modify the scoring for the class 2 measures until MVPs have been implemented. Given that CMS has significantly increased the minimum threshold for performance year 2022, eligible clinicians seeking to avoid a penalty will need every point available to them. Because MVPs are designed to simplify MIPS, CMS should consider this move as part of that simplification, not now with traditional MIPS still in place and with many other components in flux.***

CMS proposes the elimination of bonus points for end-to-end reporting and additional outcome/high priority measures for the quality category. ***The AADA urges CMS to maintain these bonus points, as these points are often what allow clinicians to meet penalty score requirements and/or get an incentive.***

There are additional changes that CMS proposes, including: introducing a 5 point floor for new measures for two years, changing the terminology "performance category percent score" to "performance category score," and basing the case minimum requirements on individual measure rather than a blanket 20-case minimum. Additionally, CMS proposes continuing the following policies: keeping data completeness for the quality category at 70% and increasing the bonus points for complex patient from 5 points to 10 points ***The AADA supports these changes.***



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In response to the PHE, CMS has allowed clinicians significantly impacted by the PHE to request reweighting for any or all of the MIPS performance categories under the extreme and uncontrollable circumstances policy. Additionally, clinicians may be eligible for automatic granting of reweighting based on whether they are in an area affected by extreme and uncontrollable circumstances. Allowing practices to have an exemption for data reporting due to extreme and uncontrollable circumstances also allows small paper-based practices to skip the administrative burden of reporting penalty free while they focus on meeting the increased demands to see patients and on stabilizing their operations. ***Given the continued course of the PHE, particularly in light of the highly contagious nature of the Delta variant, the AADA strongly encourages CMS to continue to offer both automatic and application-based exemptions for extreme and uncontrollable circumstances in 2022.***

**MIPS Cost Measures**

The 2022 proposed rule established 5 new cost measures for implementation into MIPS program, which includes the melanoma resection episode-based measure. The melanoma resection cost measure represents the cost to Medicare for the medical care furnished to a patient during an episode of care for excision procedure to remove a cutaneous melanoma. Cost measures are scored if the clinicians or groups met or exceeded the case volume: 10 episodes. There will be 2 global or population-based measures and 18 episode-based cost measures for use under cost performance category. Cost measures also will be part of the MIPS Value Pathways (MVPs) reporting. ***The AADA supports the adoption of the melanoma resection cost measure into the MIPS program. We suggest that the measure specifications used to develop the measure can achieve the goal of measuring the cost of melanoma resection that is within the control of the attributed clinician accurately. The melanoma resection cost measure will give dermatologists the opportunity to participate in the MIPS program fully. The role of CMS' contractor, Acumen, in developing the melanoma resection cost measure has been invaluable, as has the close collaboration between Acumen and the AADA during the development and testing processes. We encourage CMS to continue to partner with specialty societies in a similar fashion as it contemplates developing of future cost measures.***

**MIPS Quality Measures**

Among several proposed changes to the quality measures, CMS proposes removing QPP #137: Melanoma: Continuity of Care – Recall System from the MIPS program with the rationale that the measure does not align with the Meaningful Measures Initiative as the measure is not advancing quality care but offers performance by simply establishing a recall system. CMS notes that it does not measure quality care that directly impacts patients and is not providing a meaningful impact to quality improvement. ***The AADA strongly disagrees with CMS and urges it to retain QPP #137.*** Removing the measure will limit the number of dermatology specific measures available for dermatologists to report on. Contrary to CMS' assertion, the measure is impactful to patients, as it results in clinicians reaching out to patients with melanoma for follow-up care. CMS has failed to provide prior warning that it intended to remove this measure, and unlike other measures that have been removed due to being topped-out, this measure is not topped out.

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Another change that CMS has proposed is to remove QPP #337: Psoriasis: Tuberculosis (TB) Prevention for Patients with Psoriasis, Psoriatic Arthritis and Rheumatoid Arthritis on a Biological Immune Response Modifier with the rationale that it is duplicative to measure #176, upon proposed changes to that measure that would broaden the denominator. ***The AADA strongly disagrees with CMS and urges it to retain QPP #337. In 2021, CMS also made a similar proposal, which we opposed.***

The proposal would change the title of #176 from 'Rheumatoid Arthritis (RA): Tuberculosis Screening' to: Tuberculosis Screening Prior to First Course Biologic Therapy. The description is revised to read: If a patient has been newly prescribed a biologic disease-modifying anti-rheumatic drug (DMARD) therapy, then the medical record should indicate TB testing in the preceding 12-month period.

The proposed update to #176 would mean the denominator population would overlap with #337. Instead of the measure being specific to RA (#176) or psoriasis patients (#337), it looks to assess all patients prescribed a first course biologic DMARD therapy. ***The revision to #176 does not sufficiently cover the patients that dermatologists treat or the medications that are used, as are currently reported under #337.***

If #176 and #337 are to be combined, to avoid confusion and to be as inclusive as possible, we would prefer that a new number and title be assigned. ***We urge CMS again to make the following edits to #176:***

- ***The new measure should be added to the Dermatology Specialty Set***
- ***The description must explicitly include psoriasis and psoriatic arthritis.***
- ***The language in the denominator should be modified so that its more inclusive and does not specify "anti-rheumatic therapy." DMARDs is not a term used by most dermatologists. This should be listed as "biologic immune response modifier".***
- ***The list of medications should be expanded to include biologics dermatologists use and that are included in #337. Those medications are listed below.***
- ***The new measure must be applicable to all patients regardless of age.***

***The AADA again recommends the following biologics be added to the list of covered therapies:***

Brand name	Chemical name	Mechanism of action/Type of biologic
Rituxan	Rituximab	CD 20 directed antibody
Siliq	Brodalumab	IL-17 inhibitor
Taltz	Ixekizumab	IL-17 inhibitor
Tremfya	Guselkumab	IL-23 inhibitor
Skyrizi	Risankizumab-rzaa	IL-23 inhibitor
Ilumya	Tildrakizumab	Selective (IL)-23p19 inhibitor
Amjevita	Adalimumab-atto	TNF-alpha inhibitor
Cyltezo	Adalimumab-adbm	TNF-alpha inhibitor

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Brand name	Chemical name	Mechanism of action/Type of biologic
Erelzi	Etanercept-szsz	TNF-alpha inhibitor

**Digital Quality Measurement**

As part of its request for information on how it could best advance to digital quality measurement and the use of Fast Healthcare Interoperability Resources (FHIR) in the Physician Quality Program, CMS shared its goal to fully move to digital quality measurement in CMS' quality reporting and value-based purchasing programs by 2025. This would require CMS to further modernize quality measurement.

While we support the concept of advancing digital quality measurement and the use of FHIR, the AADA is concerned that CMS' timeline for implementation is too aggressive. There may be a heavy burden with regard to implementation for eligible clinicians that are not already technologically savvy. Technology-related shortcomings or glitches must also be carefully considered. ***The AADA recommends that CMS extend the deadline and include a transition period where clinicians who are more ready could report with this framework and those that are not would still have traditional options available.***

One change that CMS is considering to achieve these goals would be to redesign their quality measures to be self-contained tools. ***The AADA supports this idea, as it would allow providers to enter their data into an API which would calculate and score the measure and produce reports.*** Real-time processing and a feedback loop with reports would be very beneficial to providers.

**MIPS Promoting Interoperability Category**

For the 2022 performance year, CMS introduced many new proposals in the Promoting Interoperability (PI) Category. CMS proposes that physicians must attest to being in active engagement with a public health agency to a) electronically submit case reporting of reportable conditions, and b) submit and receive immunization data. If physicians fail to report in the affirmative for either of these requirements, they would score zero for the PI category. Additionally, CMS proposes that physicians must attest to conducting an annual self-assessment of the high priority practices listed in ONC's SAFER (Safety Assurance Factors for EHR Resilience) Guides. This attestation is in addition to the security risk analysis that clinicians must complete without being scored, and appears far more complicated and burdensome. ***For this reason, the AADA encourages CMS to drop the proposal to require the attestation of the SAFER guide.***

Also, CMS proposes to require physicians to make patient health information available indefinitely starting with encounters on or after January 1, 2016. While this change may burden physician practices, the benefit to patients outweighs that burden. ***The AADA supports this change.***

There has been confusion about the attestation statements that CMS currently requires physicians to make regarding the use of certified technology, the implementation of certified technology, and responding in good faith and timely to requests for electronic health information. Therefore, CMS

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proposes to eliminate these attestation requirements, otherwise referred to as statements B and C. ***The AADA supports these changes.***

### **MIPS Clinical Improvement Activities Category**

There are several improvement activities (IA) that CMS proposes to modify. With regard to IA, "Engagement of new Medicaid patients and follow up," CMS proposes to expand the target population to all underserved patients, loosen the definition of timely care to be at the discretion of the clinician, and include screening for transportation barriers to care such as Medicaid transportation benefits. These are positive changes and would be beneficial to improving access for underserved patients. Access to social workers, such as is available in academic institutions, would facilitate the engagement in this activity. Small and private physician practices may be challenged to have the resources to screen for transportation access. The highly weighted IA, "Drug Cost Transparency" would mandate the use of a real-time benefit tool (RTBT) when counseling patients and caregivers on costs of medications. ***Given the variation in physician practices' access to RTBTs, the AADA suggests that CMS maintain the use of a RTBT as optional to meet this IA.***

In the rule, CMS proposes several new improvement activities, including the creation and implementation of an anti-racism plan, the implementation of food insecurity and nutrition risk identification and treatment protocols, the implementation of a trauma-informed care approach to clinical practice, and the development and implementation of programs to support clinician well-being and resilience. ***The AADA suggests that these improvement activities have important objectives grounded in better meeting the diverse needs of patients and clinicians and are commendable. These IA would be easier for academic institutions, large group practices and private equity backed practices than small or solo practices to adopt.***

The pandemic induced need for practices to secure personal protective equipment (PPE) has compelled CMS to propose a new IA for Implementation of a Personal Protective Equipment (PPE). Physician practices need to calculate the rate at which they need to replenish PPE, however, as seen during the PHE, at times access to PPE has been challenging or near impossible. ***The AADA recommends that this IA be adjusted to focus on the planning more than the replenishing. Additionally, this IA is somewhat incongruous with CMS' refusal to separately cover PPE, as previously requested by the AADA, the American Medical Association, and several other medical specialty societies.***

### **Support for Small Group Practices Participating in QPP**

The AADA appreciates the flexibility that CMS continues to provide small physician group practice to enable them to participate in the QPP. CMS proposes to eliminate the requirement that small practices file an application to have the PI category reweighted towards quality and instead automatically qualify them for the small practice hardship exception and rewriting, to continue claims-based reporting for small practices and to give small practices 3 points for quality measure reporting. ***The AADA supports***



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***each of these efforts to support small practices and to reduce the administrative burdens associated with QPP participation.***

### **MIPS Value Pathways (MVPs)**

As evidenced by the lengthy, detailed comments above on the various MIPS proposals, the program is burdensome, complicated, and not clinically relevant. CMS' response to the criticism of MIPS has been to develop MIPS Value Pathways (MVPs) with the aim streamlining the accountability for cost, quality and the use of technology around clinical conditions or episodes of care. In the rule, CMS proposes an initial set of MVPs that physicians could voluntarily report on beginning in 2023. CMS also fine tunes previously proposed scoring and registration policies for individual clinicians, groups, and subgroups interested in participating in this voluntary option beginning in 2023.

Among these policies, CMS proposes that MVPs should include measures and activities that result in providing comparative performance data, which it notes is valuable to patients and caregivers in evaluating clinician performance and making choices about their care. The AADA suggests that is theoretically good, but it may be difficult to achieve. There may be wide variety between physicians in the same specialty and patients also vary in their ability to accurately interpret data which would improve their choices and health outcomes. For example, patients may place weight solely on cost of care and not factor in underlying factors that influence the cost or outcomes related to cost.

Echoing previous policies prioritizing a patient centered approach, CMS proposes that MVPs should include measures selected using the Meaningful Measures approach and, wherever possible, the patient voice must be included, to encourage performance improvements in high priority areas. ***The AADA suggests that including patient representatives in the measure development process meets that objective.***

Although CMS is bound by the statutory requirements including the use of the four MIPS performance categories and weighing, the agency seeks feedback on ways that MVPs can utilize more innovative approaches. ***The AADA appreciates that CMS is looking to be more innovative with the MIPS program. It is important in this rapidly changing health care environment that the agency is able to be flexible to meet the varied needs of the physician community. For some practices, having benchmarks that physicians can meet continues to be important to foster participation in MIPS. Developing new iterations of MIPS can create complexity which practices need to master. For that reason, we suggest that CMS keep the MVPs as simple as possible. Furthermore, we recommend that CMS continue to work closely with societies/stakeholders on MVP development to address challenges in implementing MVPs. Each specialty will have different needs and challenges with developing and launching MVPs.***

The development of future MVPs hinges on the existence of cost measures. Therefore, CMS seeks feedback on the challenges that stakeholders may encounter in the development of MPVs, and ways to ensure that stakeholder-developed cost measures meet certain standards and are consistent with the goals of MIPS and MVPs. ***The AADA appreciates that CMS proposes that the melanoma resection***

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***cost measure be available for reporting in 2022. In order to develop MVPs around dermatology conditions, it will be important to develop dermatology specific cost measures. As noted above, the AADA requests that CMS continue to partner with us to develop future cost measures.***

The Subgroup is a new concept for MVP participation that CMS introduces in the rule. CMS defines a Subgroup as, "A subset of a group which contains at least one MIPS eligible clinician and is identified by a combination of the group Taxpayer Identification Number (TIN), the subgroup identifier, and each eligible clinician's National Provider Identifier (NPI)." Subgroup reporting would be voluntary in performance years 2023 and 2024. ***The AADA cautions CMS that it would be premature to use the data gathered from the voluntary MVP participants to develop future benchmarks. Additionally, it is not clear why practices would be interested in forming subgroups. The AADA recommends that CMS not mandate subgroup reporting beginning in 2025 for multispecialty groups interested in MVP participation.***

CMS proposes to adopt the same changes to the scoring for traditional MIPS in the MVPs. ***The AADA's concerns with the scoring for MVPs is identical to the concerns noted above for the scoring for MIPS. While the stated goal of MVPs is to simplify MIPS, the complicated scoring of both programs frustrates that goal.***

MVPs are intended to be pathways to APM participation, yet many medical specialties, including dermatology, do not have any applicable APMs to work toward. Furthermore, with only one (new) cost measure applicable to dermatology, it is still uncertain how or when we will be able to develop MVPs. With more than 3,000 distinct skin diseases, it is not clear how long it will take to develop the sufficient array of cost measures to form dermatology specific MVPs. ***The AADA urges CMS to not finalize its proposal to phase out traditional MIPS after the 2017 performance year and to no mandate MVP participation for all MIPS clinicians beginning in 2028. CMS' goals of simplifying QPP participation and improving clinical relevance could also be achieved through increased CMS support and encouragement of qualified clinical data registries (QCDRs), including ensuring that providers using QCDRs would avoid MIPS penalties. Given the uncertainty associated with MVPs and the absence of workable APMs for most physicians, it is critical that CMS continue to support and simplify MIPS participation for the foreseeable future.***

#### **Qualified Clinical Data Registries (QCDRs)**

Prior to consideration of including qualified clinical data registry (QCDR) measures within a candidate MVP, CMS again proposes that the measures should be fully tested at the clinician level prior to the QCDR measure being included in an MVP. ***The AADA strongly urges CMS to include QCDR measures in MVPs that are undergoing testing. This will allow more thorough testing of new measures. Additionally, AADA recommends that CMS award Improvement Activity (IA) credit for practices involved in measure testing. Recruiting practices to engage in measure testing is challenging as it requires a significant commitment on the practice side and there is little incentive to do so.***

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It was expected that CMS would require QCDRs to support MVPs, however, the agency also proposes that QCDRs must support subgroups and alternative payment models (APMs) as well, all beginning in performance year 2023. For registries that are only open to specialty society members, this expansion to supporting multi-specialty groups and entities is problematic. Such an expansion would negate the ability to be a member-only benefit, which could be inclusive of our AADA-owned QCDR measure access. Requiring the support of APMs is a significant change order for QCDRs, which would greatly increase vendor cost, time and staffing resources. While Accountable Care Organizations are designed to support APMs, QCDRs are not, as their objectives and goals are dissimilar.

With regard to the self-nomination process, CMS proposes that qualified registries (QR) and QCDRs that do not submit MIPS data for the performance year will have to submit a participation plan with the self-nomination. CMS would also require the participation plan to include moving users over to submit their MIPS data through the QR. ***The AADA does not support this proposal, as it creates a significant demand on QCDRs.*** The Eligible Measure Applicability (EMA) process required for QRs is cumbersome to both the registry and Members. While the AADA's registry (DataDerm) currently uses both the QR and QCDR to collect data, it only submits the data to CMS through the QCDR to provide AADA members the option of reporting our QCDR measures. Were CMS to finalize this proposal, DataDerm would choose to no longer participate as a QR.

When CMS established the QCDR measure rejection criteria, it did not finalize that QCDRs may seek permission from another QCDR to use an existing measure that is owned by another QCDR. However, in practice, the permission of a measure owner must be received in order to use a measure owned by another QCDR in a QCDR self-nomination application. CMS now proposes that it will reject a self-nomination application that lacks permission to use a QCDR measure owned by another QCDR for the applicable performance period. ***The AADA supports this proposal.***

There are circumstances when an active QCDR wants to use an inactive QCDR's measure. CMS seeks feedback on how it should handle this situation. ***The AADA recommends that CMS require that either there be an agreement between the two QCDRs to turn over ownership of the measure or that the initial QCDR should maintain their measures and license it to other QCDRs.***

## HEALTH EQUITY REQUEST FOR INFORMATION

To advance health equity, CMS is seeking to improve data collection to better measure and analyze disparities across programs and policies, is proposing changes to MIPS intending to promote health equity, and is soliciting comments on two new proposed MIPS clinical improvement activity measures intended to achieve health equity. (See above for the AADA's comments on the proposed improvement activities). With regard to data collection, CMS is open to feedback on the future potential stratification of quality measure results by race and ethnicity, and improving demographic data collection.

The AADA believes in creating a diverse and inclusive environment where all its members have opportunities that enable them to succeed and thrive, and is committed to ensuring quality medical care

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for all our patients regardless of race, ethnicity, religion, gender, or sexual orientation. The Academy recognizes that in order to do both, increasing diversity, equity, and inclusion in the dermatology specialty must be a priority. The Academy has taken several steps and implemented initiatives over the last several years with the intentional goal of increasing diversity among our dermatologists and trainees and creating a culture of inclusivity. That work continues with a four-prong plan which includes expanding the Academy's advocacy priorities to include addressing health inequities.

***The AADA supports CMS' efforts to improve data collection that would better measure and analyze disparities across the Medicare program. However, more information is needed as to how the data is going to be used. This data should be used to correct inequities that may be found, but in a manner that does not penalize providers who lack control over the demographics of the patient populations they treat. A specific plan should be established and made public that clearly states what the demographic information can and cannot be used for, lest it be used to harm the very people it is intended to help.***

### **Conclusion**

Please contact Leslie Stein Lloyd, JD, CAE, IOM, lsteinlloyd@aad.org or 202-712-2614, if there are any questions about the recommendations in this letter. We appreciate the opportunity to work with CMS to improve the Medicare program.

Sincerely,

A handwritten signature in blue ink that reads "Kenneth J. Tomecki". The signature is written in a cursive, flowing style.

Kenneth J. Tomecki, MD, FAAD  
President, American Academy of Dermatology Association





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SOCIETY FOR CARDIOVASCULAR ANGIOGRAPHY AND INTERVENTIONS  
SOCIETY FOR CARDIOVASCULAR MAGNETIC RESONANCE  
SOCIETY FOR CLINICAL VASCULAR SURGERY  
SOCIETY FOR VASCULAR MEDICINE  
SOCIETY FOR VASCULAR NURSING  
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SOCIETY FOR VASCULAR ULTRASOUND  
SOCIETY OF CARDIOVASCULAR ANESTHESIOLOGISTS  
SOCIETY OF CARDIOVASCULAR COMPUTED TOMOGRAPHY  
SOCIETY OF DIAGNOSTIC MEDICAL SONOGRAPHY  
SOCIETY OF INTERVENTIONAL RADIOLOGY  
SOCIETY OF NEUROINTERVENTIONAL SURGERY  
SOCIETY OF NUCLEAR MEDICINE AND MOLECULAR IMAGING  
SOCIETY OF NUCLEAR MEDICINE AND MOLECULAR IMAGING TECHNOLOGIST SECTION  
SOCIETY OF PEDIATRIC ECHOCARDIOGRAPHY  
SOCIETY OF RADIOLOGISTS IN ULTRASOUND  
SOCIETY OF VASCULAR AND INTERVENTIONAL NEUROLOGY  
WORLD MOLECULAR IMAGING SOCIETY

August 31, 2021

Chiquita Brooks-LaSure

Administrator

Centers for Medicare & Medicaid Services

Department of Health and Human Services

Attention: CMS-1751-P

Baltimore, MD 21244-8016

Dear Ms. Brooks-LaSure,

The Intersocietal Accreditation Commission (IAC) welcomes the opportunity to respond to the Centers for Medicare and Medicaid Services' (CMS) request for public comments regarding the Medicare Program; CY 2022 Payment Policies under the Physician Fee Schedule. These comments specifically pertain to CMS's proposed addition of an improvement activity as outlined in Appendix 2, Table A of the proposed rule.

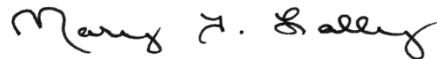
The IAC is a nonprofit, nationally recognized CMS-approved accreditation organization, founded by medical professionals to advance appropriate utilization, standardization and quality of diagnostic imaging and intervention-based procedures. IAC is a unique multi-stakeholder collaboration of physicians, technologists, sonographers, physicists, and numerous other medical professionals representing more than 40 medical specialties who contribute to its efforts. With its mission of improving health care through accreditation, the IAC utilizes a rigorous clinical peer review process to ensure that quality and safe practices are established to enhance patient outcomes. Since its inception in 1991, the IAC has granted accreditation to more than 14,000 sites in nine diagnostic imaging and intervention-based procedure accreditation programs.

The IAC commends CMS's commitment to achieving equity in health care outcomes for Medicare beneficiaries by supporting clinicians in quality improvement activities to reduce health inequities. The IAC recommends the inclusion of the proposed improvement activity titled "create and implement an anti-racism plan" under the proposed subcategory of "Achieving Health Equity" for the Merit-based Incentive Payment System (MIPS) CY 2022 Performance Period/2024 MIPS Payment Year and Future Years). (Proposed Activity ID: IA\_AHE\_XX) This proposed improvement activity is an opportunity to recognize clinicians for developing and implementing processes to reduce racism and discrimination to ensure equitable health care. The IAC also

support CMS's assignment to make this improvement activity high-weighted recognizing that clinicians will need significant investment, time, and resources to develop and implement a comprehensive anti-racism plan in their practice or health system.

The IAC supports the efforts that CMS is taking within the MIPS program to reduce health inequities. If you have questions about the IAC's recommendations, please contact Laura Blum, IAC's Chief External Relations Officer at [lblum@intersocietal.org](mailto:lblum@intersocietal.org).

Sincerely,



Mary Lally, MS, CAE  
Chief Executive Officer



September 13, 2021

Chiquita Brooks-LaSure  
Administrator  
Centers for Medicare and Medicaid Services  
Department of Health and Human Services  
7500 Security Boulevard  
Baltimore, MD. 21244-1850

**Re: CMS-1751-P; Medicare Program; CY 2022 Payment Policies under the Physician Fee Schedule and Other Changes to Part B Payment Policies; Medicare Shared Savings Program Requirements; Provider Enrollment Regulation Updates; Provider and Supplier Prepayment and Post-payment Medical Review Requirements.**

Dear Administrator Brooks-LaSure,

MarsdenAdvisors (MA) is submitting our comments on the Centers for Medicare & Medicaid Services (CMS) proposed rule regarding the 2022 Quality Payment Program. MA is an EHR consulting and software company that helps small to medium sized specialty practices implement and manage EHR technology and comply with QPP requirements. We support over 1,000 clinicians in QPP compliance and reporting nationwide.

Our experience with reporting for clinicians nationwide has given us significant insight into how changes to the MIPS program impact practices each year.

Provided below is a summary of the key points from our comments on the Quality Payment Program portion of the proposed rule. These comments are more fully developed in the body of this letter along with other issues and comments not highlighted in our summary.



## Quality Payment Program Executive Summary

### Quality Measures Removals

Many of our clients are in dermatology or ophthalmology practices. Currently, under MIPS, there is already a dearth of quality measures available for specialists or subspecialists, this is particularly true in dermatology. There are currently only nine benchmarked MIPS quality measures that are relevant to dermatology. In this proposed rule, CMS is proposing to remove several important measures, including two of the only four benchmarked dermatology measures that are not 7-point capped.

MA understands that CMS wants to ensure that the measures that clinicians report on are truly meaningful, however, by eliminating specialty-specific measures every year, we have seen the opposite effect. Without sufficient specialty-specific measures to report on, clinicians are forced to report on measures that are outside of their scope-of-practice and meaningless to their quality of care. **MA urges CMS to take this into account and to maintain sufficient specialty-specific MIPS quality measures.**

### Promoting Interoperability (PI) Public Health and Clinical Data Exchange Objective

**We strongly recommend including QCDRs as an option in the required measure set for this objective as the points earned in measure have been a driving factor in our practices choosing to join a QCDR. Moreover, QCDRs have been instrumental in identifying symptoms and sequelae of COVID-19, as demonstrated by CMS's continued inclusion of the COVID-19 registry reporting improvement activity.**

### Multiple PI Scores

Every year, there are clinicians and practices that are impacted by having multiple PI scores submitted. When this happens, CMS has been giving the clinician or group 0 points for the entire PI category, rather than using one of the two available scores. **MA is opposed to this scoring practice. As such, we strongly urge CMS to give clinicians impacted by multiple PI submissions to receive the highest PI category score of their submissions.**

### Low-Volume Claims Reporters

**MA applauds CMS's proposal to only calculate a group-level Quality performance category scores from Medicare Part B Claims measures if the practice submitted data for another performance category as a group.** We have heard several stories from practices with clinicians who do not exceed the low-volume threshold and had no intent to report MIPS, but the practice's billing software reported QDCs. Because of this, low-volume clinicians received payment penalties. **MA recommends that CMS not only finalize this proposal but also release**



**an interim final rule allowing practices in this situation to submit a targeted review for this reason beginning with the results of the 2020 MIPS performance year.**

#### Mid-Level Providers Who Do Not Provide Primary Care

In both the Cost and Quality performance categories, there are several measures that are attributed only to certain specialties. These measures classify mid-level providers – NPs, PAs, and CCNSs – as primary care providers. This is problematic for specialty practices that employ mid-level providers.

While we understand the thought process behind this designation, we represent multiple practices that employ NPs or PAs but provide no primary care. For instance, we have a dermatology practice that employs PAs and NPs who bill under the practice TIN. Under current and proposed policies, this designation of mid-levels as primary care only would inappropriately score specialty practices on primary care measures. **We urge CMS to address this problem before finalizing any additional measures that rely on these designations or to allow these clinicians and practices to submit targeted reviews to show that they are not providing primary care.**

#### MVPs

**MA strongly recommends that CMS reevaluate this timeline for sunseting traditional MIPS.** We do not believe that there will be sufficient specialty- and subspecialty-specific MVPs by 2028 to allow for appropriate measurement of all MIPS clinicians.

The issue of mid-level provider designation as primary care providers is also a problem for future MVP implementation. CMS discusses limiting participation in MVPs to clinicians who provide relevant care and limiting subgroup participation to ECs in the same or related specialties. As noted above, although PAs and NPs are often labelled as primary care providers, many work in specialty care-only practices. It is important that CMS be able to determine the specialty of care provision of mid-level providers before mandatory subgroups are implemented.

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**I. SPECIFIC ISSUES ON THE QUALITY PAYMENT PROGRAM**

**A. General Eligibility, Reporting, Scoring, and Adjustments**

**i. Reporting: Reporting Periods**

MA appreciates the consistency provided by retaining the 90-day reporting period for the Promoting Interoperability and Improvement Activities performance categories and in the calendar year reporting period for the Quality and Cost performance categories.

**ii. Reporting: Web Interface Reporting**

**We understand the need to delay the removal of the Web Interface collection type by one year due to the continued COVID-19 public health emergency (PHE). We also applaud CMS's continued commitment to remove the CMS Web Interface collection type.** There remains a need for specific-specialty information from large multispecialty groups. Under the current MIPS program, these large multispecialty groups report only primary care measures on a limited number of patients under the Web Interface reporting method, leading to a lack of meaningful participation for specialists.

**iii. Performance Thresholds**

**MA supports the proposed performance thresholds.** We believe that this will more clearly differentiate high performers and provide more meaningful payment adjustments. Given significant changes to the MIPS program, however, we urge CMS to continue to monitor changes in mean and median performance year-over-year as future thresholds are determined.

**iv. Final Scoring: Category Weights and Bonuses**

**1. Category Weights**

**MA supports the proposed performance category weights as the proposed changes are as required by law.** Despite our support, we remain concerned that the Cost category has not yielded predictable results based on practice patterns and best practices.

**2. Small Practice Bonus**

**MA appreciates the continued acknowledgement of the unique challenges faced by small practices participating in MIPS through the maintenance of the MIPS Quality Score small practice bonus.**



### 3. Complex Patient Bonus

**MA supports the proposal to extend the increased complex patient Final Score bonus to performance year 2022.** These bonus points have helped to level the field for practices that treat high-risk and complex patients. The increase in these bonus points during the COVID-19 pandemic have helped to account for the significant impact of the PHE on patient health and outcomes.<sup>1</sup>

MA is, however, concerned with the proposal to limit the bonus to clinicians who have a median or higher value for at least one of the two risk indicators (HCC and dual eligible status). These indicators fail to fully capture the desired risks of medical comorbidities and social determinants of health. Specifically, the list of HCC medical comorbidities still does not capture many important factors that increase risk or complexity for many specialties' patients. The HCC risk scores were developed for inpatient hospital diagnosis related groups (DRGs) and have never been validated for outpatient care. Therefore, we encourage CMS to push for rapid identification and incorporation of additional risk factors that influence how patients respond to care.

#### B. Targeted Reviews

**We ask CMS to allow clinicians impacted by multiple PI submissions to submit a targeted review. As the deadline will likely be prior to the issuance of the final rule, we ask that submission for this reason be allowed after the deadline. This would allow ECs to receive the PI category score from the highest scored collection type as required under CMS-finalized policy.**<sup>2</sup> We also ask that CMS allow those who previously submitted a targeted review due to this issue and were denied appropriate PI scoring to resubmit the targeted review. For further discussion, please see our comments on this issue in the [PI Scoring section](#) of these comments (pg. 18).

#### C. Extreme and Uncontrollable Circumstances

MA appreciates that CMS is continuing to accept EUC applications for issues arising from COVID-19. As we all know, this PHE is, unfortunately, far from over. We would, however, request that CMS allow EUC applications to be submitted until the end of the submission period (March 31 following the performance period). We often encounter issues with vendors accurately reporting data after the end of the performance period and, for us and our clients

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<sup>1</sup> <https://www.healthaffairs.org/doi/full/10.1377/hlthaff.2020.00350>

<sup>2</sup> 83 FR 59452

that are impacted by this, it can often be extremely difficult or impossible to correct these issues. Allowing for limited EUC applications for issues related to submission of data that occur during the submission period would, we believe, fulfill the intent of the EUC for vendor issues. As such, **we urge CMS to allow for limited EUC applications for issues related to the submission of data that both outside of clinician control and occur after the performance period but prior to the submission deadline.**

#### **D. Category Reweighting**

##### **i. Redistributing Weight to Cost Category**

**MA strongly supports CMS's proposal to continue its policy to not to redistribute weight to the Cost performance category except for when only Cost and IA are scored. We strongly urge CMS to maintain this policy in all future years.** With the continued addition of new cost episode groups to MIPS, a large percentage of Cost measures are in their first or second year of use and, therefore, untested. Additionally, the Cost Category is only able to measure short-term costs rather than long term cost savings through high quality care and care improvements, and largely ignores a substantial component of cost: Part D drugs.

Given the stronger focus on care quality in the remaining categories, we believe it would be inappropriate to redistribute the weight of any of the remaining three performance categories to the Cost Category.

##### **ii. Performance Category Redistribution Proposals for Small Practices**

**MA strongly supports CMS's proposal to limit the weight distributed to the Quality performance category for small practices.** We agree that small practices have fewer resources and more limited ability to succeed in the Quality category than do larger practices.

#### **E. Small Practices**

**MA strongly supports CMS's proposals to account for the increased strain faced by small practices participating in MIPS.** Specifically, we strongly support the proposal to establish automatic reweighting for the Promoting Interoperability category and the proposed establishment of the revised category redistribution policies for small practices. We believe that these proposals will help to level the playing field for small practices operating on narrow margins.

Small practices are more likely to be unable to afford increasing EHR maintenance and upgrade costs, especially when combined with the IT and cybersecurity staff required to maintain electronic health record security. By giving such practices an automatic hardship exception

from the Promoting Interoperability category, small practice clinicians can continue to participate in MIPS and provide quality care to those who need it most.

As stated above, MA agrees with CMS that small practices have more limited ability to succeed in the Quality category than do larger practices. Part of the reason for this emanates from more limited access to EHRs. In addition, small practices are more likely to be single sub-specialty than are larger practices. Because of this, these practices are more reliant on MIPS CQMs and Part B Claims-based measures than are larger practices. As such, **MA is concerned that CMS's proposals to eliminate many non-eCQM ophthalmology and dermatology measures that our clients rely on** to have sufficient germane measures on which to report. For further discussion, please see our comments on the [Quality measure removal proposals](#) (pg. 13).

**Finally, MA strongly supports the maintenance of the quality measure 3-point floor for small practices and the 6-point small practice bonus in the Quality category.**

## **F. Quality Category**

### **i. Category Weight and Category Reporting**

MA appreciates the measured and gradual redistribution of weight from the Cost category to the Quality category over the past several years. Of course, we support the proposal to comply with statutory requirements for Cost and Quality weight.

#### **1. Web Interface Reporting**

**We understand the need to delay the removal of the Web Interface collection type by one year due to the continued COVID-19 public health emergency (PHE). We also applaud CMS's continued commitment to remove the CMS Web Interface collection type.** For further discussion, please see [Reporting: Web Interface Reporting](#) section above on pg. 6.

#### **2. Claims Reporting**

**MA applauds CMS's proposal to only calculate a group-level Quality performance category scores from Medicare Part B Claims measures if the practice submitted data for another performance category as a group** (signaling their intent to participate as a group). We have heard several stories from practices with clinicians who do not exceed the low-volume threshold and had no intent to report MIPS, but the practice's billing software reported QDCs. Because of this, low-volume clinicians received payment penalties.

This is not a new problem and has been a voiced concern since the 2018 interim final rule discussing EUC hardships. Given the automatic EUC for COVID-19 in 2019 and 2020 for those who did not report, **MA recommends that CMS not only finalize this proposal but also release an interim final rule allowing practices in this situation to submit a targeted review for this reason beginning with the results of the 2020 MIPS performance year.**

## ii. Data Completeness Threshold

CMS proposes to maintain the current data completeness threshold of 70% for the 2022 performance year and to increase the threshold to 80% for the 2023 performance year. **MA supports the maintenance of the current data completeness threshold** but opposes the proposal to increase the data completeness threshold to 80% in 2023.

MA is concerned about the potential impact on manual reporters if the data completeness threshold is increased in future years. This would have a disproportionate impact on small and rural practices, which are significantly less likely to have an EHR. Increasing the burden on rural practices could increase barriers to care for the rural population. **Therefore, we urge CMS not to finalize the proposed 2023 data completeness threshold increase so that small and rural practices are not further burdened and disadvantaged by the program and can continue to put patients over paperwork.**

MA is also concerned about the impact of this increase of eCQM reporters. We have seen multiple instances from our clients in which they are either unable to extract a full year of data or in which a registry is unable to extract a full year of data (due to changes in EHRs during the performance year, issues with a registry vendor, ransomware, etc.). Oftentimes, this is revealed after the performance year during the submission period. Thus, these practices are unable to file for a hardship. In many, but not all, of these circumstances, we are able to meet the 70% data completeness threshold for these practices but would be unable to meet an 80% data completeness threshold. If the increase to 80% is finalized, these practices would be less likely to be able to meet the threshold and would, therefore, receive significantly lower Quality scores through no fault of their own.

## iii. Scoring for the 2022 Performance Year

### 1. Small Practice Bonus

**MA appreciates the continued acknowledgement of the unique challenges faced by small practices participating in MIPS through the maintenance of the MIPS Quality category small practice bonus.**



## 2. High-Priority Measure Bonus

CMS is proposing to remove high-priority measure bonus points beginning with the 2022 performance year. CMS states these bonus points are no longer necessary to drive ECs to report these measures. From what we have seen in our practice, these bonus points are still necessary for many specialty and sub-specialty practices. The removal of this incentive will cause practices in specialties with few benchmarked high priority or outcome measures that are not topped out to turn to unrelated process measures to have a chance at a decent Quality score. Because of this, we strongly encourage CMS to continue to encourage high priority and outcome measure reporting by maintaining this bonus. **CMS must continue to incentivize ECs to report available germane outcome and high priority measures to drive high quality care.**

## 3. End-to-End Reporting Bonus

**MA opposes CMS's proposal to remove the end-to-end electronic reporting bonus beginning with the 2022 performance year.** We respectfully recommend that CMS maintain this incentive, in compliance with section 1848(q)(5)(B)(ii) the SSA which was modified by MACRA to require encouraging electronic reporting. We believe this will continue to drive electronic reporting, as well as provide much-needed stability in the MIPS program for participating ECs.

In future years, if CMS decides to remove this category bonus, we ask CMS to, at minimum, consider a bonus on the MIPS Final Score for active engagement in a clinician-led QCDR.

## 4. Point Floor

We support the proposed maintenance of the 3-point floor for measures reported by small practices. We agree that it is more difficult for small practices, especially small subspecialty practices, to meet case minimums. Not only do these practices see fewer patients than do larger practices, but subspecialty practices are also less likely to be able to find six germane quality measures on which to report. Because of this, they often resort to reporting measures that not directly related to their clinical practice, making it even more difficult to meet case minimums. Thus, we applaud CMS for proposing to maintain this important accommodation and support its finalization.

## 5. 5-Point Floor for New Measures

**MA overwhelmingly supports CMS's proposal to establish a 5-point floor for new measures in their first two years in MIPS.** As measures become topped out and removed, we are in increasingly dire need for new specialty-specific quality measures. There are several specialty-specific QCDRs that have risen to this challenge.

Unfortunately, since the inception of MIPS, reporting on unbenchmarked quality measures has been a risky decision given the limited contribution they have been allowed to make toward the quality score. Because of this, many thoughtfully developed and important measures remain unbenchmarked. This is particularly a problem with our clients in dermatology as the American Academy of Dermatology's QCDR, DataDerm, currently has no benchmarked measures.

CMS states that this proposal stems from the desire that policies not "discourage the reporting of new measures in the program". MA applauds this desire and agrees that, for new measures, this proposal is an excellent solution. However, countless hours and resources have been spent on developing the currently unbenchmarked QCDR measures, many of which have already been in MIPS for two or more years but have been largely ignored due to the risk assumed in reporting them. **To address this discrepancy and the growing gap in specialty-specific measures, we ask that CMS also apply this policy to measures that have never been benchmarked.**

#### **6. Benchmark Determination: Measures Suppressed in the Baseline Year**

MA supports CMS's proposal to use data from 3 years prior to the performance period to establish benchmarks for measures suppressed in the baseline year.

#### **7. Benchmark Determination: 2022 Performance Year**

We appreciate CMS's recognition of the difficulties calculating representative benchmarks from performance year 2020 given the COVID-19 flexibilities on data submission. In response to this issue, CMS proposes to adopt one of two options for the determination of quality measure benchmarks for the 2022 performance year. The primary proposal is to use performance period benchmarks; the alternate proposal is to use historical benchmarks from 2019.

We are strongly opposed to the primary proposals which would be strict change from historical benchmarks to performance period benchmarks. We support over 1,000 eligible clinicians with their MIPS submissions, and we use the benchmarks throughout the year to track our score. Without a known benchmark, we will be flying blind which will lead to additional documentation burden to setup supplementary measures as a safety net. **We urge CMS to continue to use the historical benchmark of baseline period 2019 as we are currently using for 2021 performance period.**

#### **8. Topped Out Measure Scoring in 2022**

**MA supports CMS's proposed two criteria for determining which measures should have the 7-point cap applied to them in the 2022 performance year.** We thank CMS for creatively and fairly addressing the problem by providing confidence in measure scoring to clinicians choosing quality measures for the 2022 performance year.

## 9. Measure Suppression and Truncation Proposal

**MA supports CMS's proposal to expand the list of reasons that a quality measure may be suppressed or truncated to include errors in the measure specifications as finalized.** As many of our clients are ophthalmologists, we had several impacted by the issues with measures 1 and 117 this year in which MACs were rejecting the submission of the QDCs due to an inactive status for certain CPT codes. We agree that, without suppression, this would lead to misleading results. **MA requests clarification on how CMS will determine which ECs were trying to submit these measures as the QDCs that are rejected are not available to CMS for Quality measurement.**

### iv. Proposed Changes to Quality Measures

#### 1. Changes to Measure 117: Diabetes Eye Exam

**MA supports CMS's proposed change** to clarify that the diagnosis must be active during the measurement period, rather than "overlapping the measurement period". This has been a long-standing source of confusion for people reporting this measure and this is a welcome clarification.

#### 2. Changes to Measure 265: Biopsy Follow-Up

**MA supports CMS's proposed clarifications to this measure** that if multiple biopsies are performed, only the first biopsy is used for this measure and that only new patients should be reported for this measure.

#### 3. Changes to Measure 374: Closing the Referral Loop: Receipt of Specialist Report

**MA supports CMS's proposed change** to clarify that the first referral during the measurement period is the one that will count toward this measure.

### v. Proposed Quality Measure Removals

MA understands that CMS wants to ensure that the measures that clinicians report on are truly meaningful, however, by eliminating specialty-specific measures every year, we have seen the opposite effect. Without sufficient specialty-specific measures to report on, clinicians are forced to report on measures that are outside of their scope-of-practice and meaningless to their quality of care. **MA urges CMS to take this into account and to maintain sufficient specialty-specific MIPS quality measures.**

**1. Measure 14: Age-Related Macular Degeneration (AMD): Dilated Macular Examination**

**MA is opposed to CMS's proposal to remove Measure 14.** Although the measure is topped out, it is still an important measure for patient care. Moreover, there are currently only four benchmarked MIPS measures for the retina subspecialty, two of which are being proposed for removal. This would leave clinicians in the retina subspecialty to try to find measures completely unrelated to their clinical practice, rather than meaningful measures.

This will also have a disproportionate impact on small and rural practices as they are more likely to have a smaller patient population or be single-specialty. Both of these features make it less likely that the practice will be able to reach sufficient patient numbers for measures unrelated to their clinical practice.

**2. Measure 19: Diabetic Retinopathy: Communication with the Physician Managing On-going Diabetes Care**

**MA opposes CMS's proposed removal of Measure 19.** This measure has seen year-over-year improvement and is still important for improving and driving coordinated care. By removing this measure, CMS is removing the structure and incentive for clinicians and practices to monitor this important metric.

In addition, there are currently only four benchmarked MIPS measures for the retina subspecialty, two of which are being proposed for removal. This would leave clinicians in the retina subspecialty to try to find measures completely unrelated to their clinical practice, rather than meaningful measures.

**3. Measure 137: Melanoma: Continuity of Care – Recall System**

**MA opposes CMS's proposed removal of Measure 137: Melanoma: Continuity of Care - Recall System.** The reason for the proposal is that it does not advance quality care. However, this measure does advance quality care because it holds practices accountable to ensure patients with a history of melanoma have a recall process established to confirm exams are scheduled and occur. Considering the risks involved with a melanoma diagnosis and patients "slipping through the cracks", the recall process of this MIPS measure provides a fail-safe way for clinicians to ensure their patients have skin exams in their predetermined time frame. **Therefore, we strongly urge CMS to retain measure 137 to promote critical, life-saving exams for melanoma patients.**

There are currently only nine benchmarked MIPS quality measures that are relevant to dermatology, only four of which are not 7-point capped. Measure 137 is one of these four



measures. In addition, there are currently no QCDR dermatology measures that are benchmarked. Further reducing the ability of dermatologists to score well in Quality, based solely on the measures available, does a disservice to the program and the specialty.

#### **4. Measure 337: Psoriasis: TB Prevention for Patients with Psoriasis, Psoriatic Arthritis and RA on a Biological Immune Response Modifier**

**MA opposes CMS's proposal to remove Measure 337.** The stated reason for proposed removal is that measure 176 (TB Screening Prior to First Course Biologic Therapy) is proposed to be expanded to include the scope of CQM 337's measure intent. However, measure 176 is neither supported by the AAD's MIPS registry nor in the dermatology measure set, thus this proposal would create increased compliance burden for dermatologists who have relied on measure 337.

**Moreover, the proposed changes to measure 176 do not adequately encompass the biological response modifiers used in dermatology and listed in measure 337.**

There are currently only nine benchmarked MIPS quality measures that are relevant to dermatology, only four of which are not 7-point capped. Measure 337 is one of these four measures. In addition, there are currently no QCDR dermatology measures that are benchmarked. Further reducing the ability of dermatologists to score well in Quality, based solely on the measures available, does a disservice to the program and the specialty. **Therefore, we strongly urge CMS to retain measure 337 by at least two years to allow additional dermatology measures to be added to the program.**

#### **vi. Proposed New Quality Measures**

##### **1. Risk-Standardized Acute Unplanned Cardiovascular- Related Admission Rates for Patients with Heart Failure**

**MA is concerned that PAs and NPs who don't provide any cardiac care will be inappropriately included in this measure.** In the proposed measure specification, CMS states that this measure would be applied to Primary Care Providers, including NPs, PAs, and certified clinical nurse specialists (CCNSs) as identified by two-digit specialty code. While we understand the thought process behind this designation, we represent multiple practices that employ NPs or PAs but provide no primary care. For instance, we have a dermatology practice that employs PAs and NPs who bill under the practice TIN. As written and proposed, this measure would inappropriately score their performance and, thus, the practice would be scored on this measure.

The TEP identified the following as appropriate for attribution under this measure: cardiologists, internal medicine, family medicine, general medicine, and geriatric medicine. NPs, PAs, and CCNSs are also identified, but only under the assumption that they provide primary care. Clearly, for practices like this dermatology practice, the NPs and PAs do not provide primary care but, rather, dermatologic care.

**Until CMS is able to remedy the issue of inappropriate attribution to NPs and PAs not practicing in the measured specialties, we strongly urge CMS not to finalize this measure for inclusion in MIPS.**

**2. Annual risk-standardized rate of acute, unplanned hospital admissions among Medicare Fee-for-Service (FFS) patients aged 65 years and older with multiple chronic conditions (MCCs)**

As with the above measure, we are concerned that PAs, NPs, and other mid-level providers could be attributed this measure, even if they do not practice in the measured specialties (primary care, cardiology, pulmonology, nephrology, neurology, endocrinology, and hematology/oncology). For instance, a PA or NP working at a dermatology practice should never be attributed this measure. **Until CMS and the measure developer are able to remedy the issue of inappropriate attribution to NPs and PAs not practicing in the measured specialties, we strongly urge CMS not to finalize this measure for inclusion in MIPS.**

**3. COVID-19 Measure Specification for Potential Future Use**

MA agrees that measuring patient COVID-19 vaccination is incredibly important for mitigating the impact of the pandemic and the emergence of new variants. Therefore, **we ask CMS to issue an Interim Final Rule making this measure mandatory in the 2022 performance year.** However, given that convincing patients that the conspiracies circulating about this vaccine are not accurate is not entirely dependent on physician skill at motivational interviewing, we strongly recommend the measure be amended to take this into account. **Specifically, we suggest either the addition of a denominator exception for patient refusal to receive the vaccine, or that the numerator measure whether clinicians have a conversation/education with the patient about the importance of COVID-19 vaccination.** Without this modification, clinicians in certain geographic areas, including rural physicians, will be disadvantaged under this measure.

**G. Improvement Activities Category**

**i. Category Weight and Reporting**

**MA appreciates the consistency in category weight and reporting period for the Improvement Activities Category for performance year 2022.**

**ii. Scoring**

**In this proposed rule, CMS has preserved the provision of double points for each improvement activity reported by small practices.** Maintaining this accommodation aligns with the goal of reducing burdens, particularly on small practices. **MA supports this decision and encourages CMS to continue this policy in future years.**

**iii. Proposed Changes to the Engagement of New Medicaid Patients and Follow-up IA**

MA agrees with the goal of increasing attention on social determinants of health which, of course, extend beyond the Medicaid population. Despite this, we are concerned that the proposed modification to expand the patient population of this IA to “other underserved patients” may complicate the reporting and documentation of this measure. In order to perform this measure, practices would have to ask patients how much they make, how big their family is, and other questions that may make patients uncomfortable if asked by a scheduler. In addition, this will make it more difficult to filter records for these patients in practice management and scheduling software. Therefore, **we encourage CMS to maintain more clear definitions on the applicable patient population for this IA.**

CMS is also proposing to remove the reference to timeliness as within 10 business days and to replace it with the collection of time-to-treat data. In combination with the change in patient populations, this would require more complex analysis by clinicians and practices to determine and evaluate patterns of care and engagement. **Rather than adding all of these factors into one, much more complex IA, MA recommends that CMS consider creating separate IAs for identified barriers to care.**

**iv. Proposed New IAs**

**1. IA\_AHE\_XX: Create and Implement an Anti-Racism Plan**

We applaud CMS’s proposal to include this IA in the inventory in 2022.

## 2. IA\_ERP\_XX: Implementation of a PPE Plan

We agree with CMS that preparation for current and future pandemics is essential for healthcare workers. Because of this and because of the impact of inadequate policies and PPE has had during the COVID-19 pandemic, we urge CMS to finalize this as a high weighted IA.

### H. Promoting Interoperability Category

#### i. Category Weight and Performance Period

**MA supports CMS's maintenance of a 90-day reporting period for Promoting Interoperability (PI) for the 2022 performance year and all future years.** Achieving full-year reporting for Promoting Interoperability is very difficult for many clinicians. There are several factors outside of clinician control that contribute to this difficulty. Some examples include switching EHRs, system glitches, updates and downtime, and office relocations.

#### ii. Hardships

**MA enthusiastically supports CMS's proposal to establish automatic reweighting for the Promoting Interoperability category for small practices.** Small practices are more likely to be unable to afford increasing EHR maintenance and upgrade costs, especially when combined with the IT and cybersecurity staff required to maintain electronic health record security. By giving such practices an automatic hardship exception from the Promoting Interoperability category, small practice clinicians can continue to participate in MIPS and provide quality care to those who need it most.

#### iii. Scoring: Multiple PI Scores

**MA is opposed to the way in which CMS scores the PI category when it is reported through multiple mechanisms or from multiple sources for the same EC or group.** CMS established only through subregulatory guidance, *not through rulemaking*, that if a clinician or group submits PI data more than once, they will receive a score of 0 in the PI category. This decision has a negative impact on clinicians who may report through multiple mechanisms or who may have PI reported for them by another body, such as an ACO, without their knowledge. **Moreover, it violates policy that was previously finalized through notice-and-comment rulemaking and the Administrative Procedures Act** (as CMS established this important policy without notice-and-comment rulemaking). In the 2018 QPP Final Rule, CMS finalized that clinicians and groups would be allowed to submit data for the same performance category via multiple submission mechanisms and would be assigned the highest of the reported scores for each measure. No change to this policy has been proposed or finalized. **We strongly urge CMS to allow clinicians**



impacted by multiple PI submissions to receive the highest PI category score of their submissions. We also ask CMS to allow these practices to submit a targeted review after the deadline (as the deadline will be prior to the publication of the final rule) so that they may receive the PI category score from the highest scored collection type as required under CMS-finalized policy.

**iv. Scoring: Public Health and Clinical Data Exchange Objective**

We understand and agree with the importance of both Immunization Registry Reporting and Electronic Case Reporting, particularly in light of the COVID-19 pandemic and in preparation for future pandemics. We are, however, concerned that **eliminating credit for this objective for those who are unable to report for those two measures due to their specialty or region will eliminate the incentive for other forms of meaningful reporting that has proven useful during the pandemic. Clinical data registries have been instrumental in identifying symptoms and sequelae of COVID-19**, as demonstrated by CMS's continued inclusion of the COVID-19 registry reporting improvement activity. We ask CMS to consider this when developing the final policy for this objective. Many specialists cannot report to the Immunization or Case Reporting registries but are able to report to a Qualified Clinical Data Registry (QCDR). **We strongly recommend including QCDRs as an option in the required measure set for this objective as the points earned in measure have been a driving factor in our practices choosing to join a QCDR.**

In addition, under MACRA (Sec. 101 (c)(1)), CMS is supposed to incentivize QCDR and EHR reporting of quality measures. This section modified section 1848(q)(5)(B)(ii) of the SSA to state that "Under the MIPS, the Secretary shall encourage the use of qualified clinical data registries pursuant to subsection (m)(3)(E) in carrying out this subsection."

Despite this statutory requirement, CMS is proposing to remove credit for active engagement with a QCDR unless at least one of the two proposed required measures is attested to; in addition to CMS is proposing, in the Quality category, to remove the end-to-end electronic reporting bonus. These were the only two methods of encouraging the use of QCDRs in MIPS. As such, we are struggling to identify any encouragement or stand-alone credit for active QCDR participation in MIPS as proposed for performance year 2022.

**Congress has made clear their desire to drive true value under Medicare and has recognized the lowest burden and most effective tool to achieve this goal – clinician-led, specialty society QCDRs. We ask that CMS follow their Congressional mandate to better leverage and encourage participation in clinician-led, specialty society QCDRs in the MIPS program in this and all future years.**

**v. Proposed Changes to Promoting Interoperability Objectives and Measures**

**1. Provide Patients Electronic Access to Their Health Information**

MA understands the impetus for the proposed change to this measure, however, **we strongly urge CMS to not finalize the proposed change**. Requiring clinicians in non-hospital-affiliated practices to store and make available patient data indefinitely and using any application of their choice (if configured to meet the technical specifications of the EHR's API) is a significant increase in burden and does not align with current HIPAA regulations or requirements placed on EHRs. We anticipate that this will lead to a decrease in clinicians able to report the PI category due to EHR hardships related to this measure and, thus, a backtrack on the progress CMS has made toward promoting interoperability under MIPS. **We urge CMS to delay this proposal at least until 2024, when EHRs must be certified to the data export functionality.**

Even in this scenario however, practices would have to pay for additional data storage. This would be especially burdensome for small and rural practices that are already operating on slim margins.

Finally, CMS states that they believe that this aligns with Patient Access and Interoperability final rule. The related provisions in the referenced rule apply only to hospitals and CAHs, not to physician practices. **Therefore, we strongly recommend that CMS not finalize this change for the 2022 MIPS performance year and, at minimum, conduct a study with physician stakeholders to evaluate the impact of this proposal on small and rural practices.**

**2. Query of Prescription Drug Monitoring Program (PDMP)**

MA agrees that the continued impact of the opioid epidemic should be addressed on all fronts. We would support making this measure mandatory in the future with one stipulation – there must be an exclusion for ECs who do not prescribe opioid medications. If this exclusion is not added prior to making this measure mandatory, this measure would have the opposite of the intended effect. Rather than driving more responsible opiate prescription practices, it could drive physicians who do not prescribe opioid medications to prescribe one at least one time during the performance period in order to avoid failing the PI category and, by extension, likely failing MIPS. As such, **MA strongly urges CMS to add an exclusion for ECs who are low-volume or never prescribers of opioid medications prior to making this measure mandatory.**

**vi. Proposed New Measure: SAFER Guides**

In the context of the continuing increase in cyberattacks against medical providers, **MA supports the addition of the SAFER Guides measure to the PI category.**

## I. Cost Category

### i. Category Weight

**MA supports the proposed performance category weight as the proposed changes are as required by law.** Despite our support, we remain concerned that the Cost category has not yielded predictable results based on practice patterns and best practices.

### ii. Cost Measure Suppression

MA supports the proposal to suppress cost measures impacted by significant changes during the performance period. We agree that, should changes likely yield misleading or inaccurate results, it would be inappropriate to score clinicians on impacted measures.

### iii. Melanoma Resection Cost Measure

We are concerned with the low 10-episode case minimum for this measure. Though we understand that CMS has determined that this provides sufficient reliability and that this is consistent with previously finalized regulations regarding the case minimums for procedural measures, we are concerned that this may result in 30% of a clinician's MIPS score being based on a procedure they perform only very rarely. We ask that CMS reevaluate this policy.

### iv. Diabetes Cost Measure

Based on the measure specification and the field test results, MA is concerned that clinicians who do not manage a patient's diabetes will be attributed this measure. Specifically, clinicians who are only treating a system-specific complication such as diabetic retinopathy or diabetic dermatitis, should be excluded from this measure. This measure is more appropriate for the clinician managing the patient's diabetes. Clinicians who are only treating system-specific complications, rather than managing the patient's diabetes, should be excluded from this measure.

## J. MIPS Value Pathways

### i. Delay of MVP Implementation

**MA approves of the proposal to delay the implementation of MVPs to performance year 2023.** The impact of the COVID-19 PHE has been dramatic; we agree that this proposed delay is appropriate.

## ii. Mandatory MVP Participation

In this proposed rule, CMS stated their intent to sunset traditional MIPS at the end of the 2027 performance year and make MVP participation mandatory beginning with the 2028 performance year. **MA strongly recommends that CMS reevaluate this timeline.** We do not believe that there will be sufficient specialty- and subspecialty-specific MVPs by performance year 2028 to allow for appropriate measurement of all MIPS clinicians under the MVP.

Making MVPs mandatory before such a time as all specialties and subspecialties have germane MVPs to participate in will disadvantage certain specialties and small and rural practices. Clinicians whose practice mix and focus is inappropriately represented among MVPs will have difficulty being measured on the care they provide as they will have a smaller proportion of their patients who qualify to be included in the MVP's measures. Furthermore, due to the smaller number of patients seen by small practices, singular adverse events will have a substantially greater impact on small practices than large practices.

In addition, topped out measure inclusion in MVPs pose another problem. By requiring clinicians to report on specific measures, CMS may directly disadvantage particular specialties and types of practices. As stated above, small practices have a smaller number of patients, making singular adverse events have a substantially greater impact on them. This is particularly pertinent as clinicians would no longer be able to choose measures with less clustered performance.

Although CMS has stated that "maintaining both traditional MIPS and MVPs is not a feasible long-term approach for the agency" we believe that this is an approach that must be attempted, at minimum, **until such a time as sufficient MVPs are available to allow appropriate measurement of all MIPS specialties and subspecialties.**

## iii. Subgroup Reporting

**MA supports the proposal to require sub-group reporting for those in the MVP track beginning in performance year 2025.** We agree that it is important to ensure that each clinician can be measured and scored on metric germane to their practice. For these same reasons, we also support the proposal to allow voluntary subgroup reporting beginning with the 2023 performance year.

We believe that these sub-groups should be limited only to ECs in the same or related specialties. We also believe that an approved list of specialties for each finalized MVP would be an appropriate step. It is, however, important to note that this can be difficult for mid-level providers. For example, PAs and NPs are often labelled as primary care providers. Despite this, many work in specialty care-only practices. It is important that CMS be able to determine the specialty of care provision of mid-level providers before mandatory subgroups are implemented.



Finally, **MA supports allowing, but not requiring, subgroup level PI performance data reporting beginning in performance year 2023. When both a group and a constituent subgroup both submit PI data, we strongly recommend that CMS not penalize the group or subgroup by assigning them a PI score of 0 as has been the case under traditional MIPS.**

**iv. MVP Participant Registration**

**MA supports the proposed registration proposed for MVP and subgroup elections.**

**v. Scoring**

**MA supports the following MVP scoring proposals:**

- Proposal on facility-based scoring
- Proposal on complex patient bonus
- Proposal to suppress the population health measure if it does not have a benchmark or if the subgroup does not meet case minimum
- Proposal to reduce the total Quality denominator accordingly for small practices reporting via claims
- IA proposal to give all practices 40 points for high-weighted IAs and 20 points for medium-weighted IAs.

**vi. Category Weight Redistribution**

**MA opposes the proposal to not allow for MVP Quality category reweighting.** We believe that category reweighting should align with traditional MIPS. CMS has previously recognized that there are extreme circumstances that could eliminate a practice's ability to report on the categories with year-long performance periods, but not on the shorter performance periods. **Should CMS finalize the proposal to not allow for MVP Quality category reweighting, they must allow practices and subgroups that cannot report Quality to be excluded entirely from MIPS and MVPs for that performance year.**

MA largely supports CMS's proposal to apply any reweighting applied to a group to any constituent subgroups of the group, with one exception. **We strongly urge CMS not to score the entire practice should a subgroup of the practice submit data on a category that the practice, as a whole, received reweighting on** (either via application or automatic EUC policy). We believe it will be a likely point of confusion for groups and subgroups and could inappropriately contribute to poor performance.

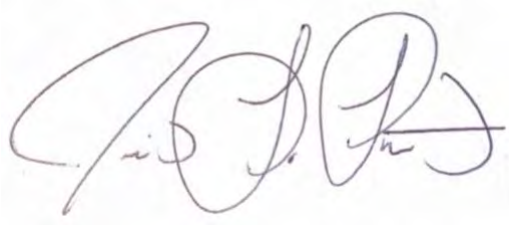
**K. APM Scoring Standard and APM Performance Pathway (APP)**

MA applauds CMS's development of the APP and believes that it is an excellent way to measure primary care. The quality measures included are not appropriate for most specialists though. **As such, we strongly encourage CMS to maintain the APP as optional in the future** to allow clinicians in MIPS APMs to report in alternative ways so they may be evaluated on measures germane to their specialty.

**Conclusion**

We appreciate the opportunity to work with CMS to improve the Quality Payment Program. If you have questions or need any additional information regarding any portion of these comments, please contact Dr. Jessica Peterson, VP of Health Policy at MarsdenAdvisors at [jessica@marsdenadvisors.com](mailto:jessica@marsdenadvisors.com).

Sincerely,

A handwritten signature in blue ink, appearing to read 'Jessica Peterson', is written over a light blue rectangular background.

Jessica L. Peterson, MD, MPH  
VP of Health Policy at Marsden Advisors

**DEPARTMENT OF HEALTH AND HUMAN SERVICES**

**Centers for Medicare & Medicaid Services**

**42 CFR Parts 403, 405, 410, 411, 414, 415, 423, 424, and 425**

**[CMS–1751–P]**

**RIN 0938–AU42**

**Medicare Program; CY 2022 Payment Policies Under the Physician Fee Schedule and Other Changes to Part B Payment Policies; Medicare Shared Savings Program Requirements; Provider Enrollment Regulation Updates; Provider and Supplier Prepayment and Post-Payment Medical Review Requirements.**

**AGENCY:** Centers for Medicare & Medicaid Services (CMS), Health and Human Services (HHS).

**ACTION:** Proposed rule.

**SUMMARY:** This major proposed rule addresses: Changes to the physician fee schedule (PFS); other changes to Medicare Part B payment policies to ensure that payment systems are updated to reflect changes in medical practice, relative value of services, and changes in the statute; Medicare Shared Savings Program requirements; updates to the Quality Payment Program; Medicare coverage of opioid use disorder services furnished by opioid treatment programs; updates to certain Medicare provider enrollment policies; requirements for prepayment and post-payment medical review activities; requirement for electronic prescribing for controlled substances for a covered Part D drug under a prescription drug plan, or a Medicare Advantage Prescription Drug (MA–PD) plan; updates to the Medicare Ground Ambulance Data Collection System; changes to the Medicare Diabetes Prevention Program (MDPP) expanded model; and amendments to the physician self-referral law regulations.

**DATES:** To be assured consideration, comments must be received at one of the addresses provided below, no later than 5 p.m. on September 13, 2021.

**ADDRESSES:** In commenting, please refer to file code CMS–1751–P. Comments, including mass comment submissions, must be submitted in one of the following three ways (please choose only one of the ways listed):

1. *Electronically.* You may submit electronic comments on this regulation to <http://www.regulations.gov>. Follow the “Submit a comment” instructions.

2. *By regular mail.* You may mail written comments to the following address ONLY: Centers for Medicare & Medicaid Services, Department of Health and Human Services, Attention: CMS–1751–P, P.O. Box 8016, Baltimore, MD 21244–8016.

Please allow sufficient time for mailed comments to be received before the close of the comment period.

3. *By express or overnight mail.* You may send written comments to the following address ONLY: Centers for Medicare & Medicaid Services, Department of Health and Human Services, Attention: CMS–1751–P, Mail Stop C4–26–05, 7500 Security Boulevard, Baltimore, MD 21244–1850.

**FOR FURTHER INFORMATION CONTACT:**

*DivisionofPractitionerServices@cms.hhs.gov*, for any issues not identified below.

Michael Soracoe, (410) 786–6312, for issues related to practice expense, work RVUs, conversion factor, and PFS specialty-specific impacts.

Larry Chan, (410) 786–6864, for issues related to potentially misvalued services under the PFS.

Donta Henson, (410) 786–1947, Patrick Sartini, (410) 786–9252, and Larry Chan, (410) 786–6864, for issues related to telehealth services and other services involving communications technology.

Julie Adams, (410) 786–8932, for issues related to payment for anesthesia services.

Sarah Leipnik, (410) 786–3933, for issues related to split (or shared) services.

Christiane LaBonte, (410) 786–7237, for issues related to indirect practice expense, PFS payment for critical care services, and PFS payment for teaching physician services.

*DivisionofPractitionerServices@cms.hhs.gov*, for issues related to payment for vaccine administration services.

Regina Walker-Wren, (410) 786–9160, for issues related to billing for services of physician assistants.

Pamela West, (410) 786–2302, for issues related to PFS payment for therapy services, medical nutrition therapy services, and services of registered dietitians and nutrition professionals.

Liane Grayson, (410) 786–6583, and Donta Henson, (410) 786–1947, for issues related to coinsurance for certain colorectal cancer screening services.

Lisa Parker, (410) 786–4949, for issues related to RHCs and FQHCs.

Laura Kennedy, (410) 786–3377, for issues related to drugs payable under Part B.

Heather Hostetler, (410) 786–4515, and Elizabeth Truong, 410–786–6005, for issues related to removal of select national coverage determinations.

Sarah Fulton, (410) 786–2749, for issues related to Appropriate Use Criteria for Advanced Diagnostic Imaging (AUC); and Pulmonary Rehabilitation, Cardiac Rehabilitation and Intensive Cardiac Rehabilitation.

Rachel Katonak, (410) 786–8564, for issues related to Medical Nutrition Therapy.

Fiona Larbi, (410) 786–7224, for issues related to the Medicare Shared Savings Program (Shared Savings Program) Quality performance standard and quality reporting requirements.

Janae James, (410) 786–0801, or Elizabeth November, (410) 786–4518, or *SharedSavingsProgram@cms.hhs.gov*, for issues related to Shared Savings Program beneficiary assignment, repayment mechanism requirements, and benchmarking methodology.

Naseem Tarmohamed, (410) 786–0814, or *SharedSavingsProgram@cms.hhs.gov*, for inquiries related to Shared Savings Program application, compliance and beneficiary notification requirements.

Amy Gruber, *AmbulanceDataCollection@cms.hhs.gov*, for issues related to the Medicare Ground Ambulance Data Collection System.

Juliana Tionson, (410) 786–0342, for issues related to the Medicare Diabetes Prevention Program (MDPP).

Laura Ashbaugh, (410) 786–1113, for issues related to Clinical Laboratory Fee Schedule: Laboratory Specimen Collection and Travel Allowance and Use of Electronic Travel Logs.

Frank Whelan, (410) 786–1302, for issues related to Medicare provider enrollment regulation updates.

Thomas J. Kessler, (410) 786–1991, for issues related to provider and supplier prepayment and post-payment medical review requirements.

Lindsey Baldwin, (410) 786–1694, and Michele Franklin, (410) 786–9226, for issues related to Medicare coverage of opioid use disorder treatment services furnished by opioid treatment programs.

Lisa O. Wilson, (410) 786–8852, or Meredith Larson, (410) 786–7923, for inquiries related to the physician self-referral law.

Joella Roland, (410) 786–7638, for issues related to requirement for electronic prescribing for controlled substances for a covered Part D drug under a prescription drug plan or an MA–PD plan.

Kathleen Ott, (410) 786–4246, for issues related to open payments.

- In what ways could a CMS FHIR Reporting IG be crafted to reduce burden on providers and vendors?

(c) Changes Under Consideration To Advance Digital Quality Measurement

Actions in Four Areas to Transition to Digital Quality Measures by 2025.

- We are seeking feedback on the following as described in section IV.A.1.c. of this proposed rule:

- ++ Do you agree with the goal of aligning data needed for quality measurement with interoperability requirements? What are the strengths and limitations of this approach? Are there specific FHIR Implementation Guides suggested for consideration?

- ++ How important is a data standardization approach that also supports inclusion of PGHD and other currently non-standardized data?

- ++ What are possible approaches for testing data quality and validity?

- We are seeking feedback on the following as described in section IV.A.1.c. of this proposed rule:

- ++ What functionalities, described in Section (4)(b) or others, should quality measure tools ideally have in the context of the pending availability of standardized and interoperable data (for example, standardized EHR data available via FHIR-based APIs)?

- ++ How would this more open, agile strategy for end-to-end measure calculation facilitate broader engagement in quality measure development, the use of tools developed for measurement for local quality improvement, and/or the application of quality tools for related purposes such as public health or research?

- We seek feedback on the following as described in section IV.A.1.c. of this proposed rule:

- ++ What are key policy considerations for aggregation of data from multiple sources being used to inform measurement?

- ++ What role can or should data aggregators play in CMS quality measure reporting in collaboration with providers? How can CMS best facilitate and enable aggregation?

- We seek feedback on the following as described in section IV.A.1.c. of this proposed rule:

- ++ What are initial priority areas for the dQM portfolio given evolving interoperability requirements (for example, measurement areas, measure requirements, tools)?

- ++ We also seek to identify opportunities to collaborate with other federal agencies, states, and the private sector to adopt standards and technology-driven solutions to address

our quality measurement priorities and across sectors.

Commenters should consider provisions in the CMS Interoperability and Patient Access final rule (85 FR 25510), CMS CY 2021 PFS final rule (85 FR 84472), and the ONC 21st Century Cures Act final rule (85 FR 25642).

We plan to continue working with other agencies and stakeholders to coordinate and to inform any potential transition to dQMs by 2025. While we will not be responding to specific comments submitted in response to this Request for Information in the CY 2022 PFS final rule, we will actively consider all input as we develop future regulatory proposals or future subregulatory policy guidance. Any updates to specific program requirements related to quality measurement and reporting provisions would be addressed through separate and future notice-and-comment rulemaking, as necessary.

d. Closing the Health Equity Gap in CMS Clinician Quality Programs—Request for Information (RFI)

Persistent inequities in health care outcomes exist in the United States, including among Medicare patients.<sup>142</sup> In recognition of persistent health disparities and the importance of closing the health equity gap, we request information on revising several related CMS programs to make reporting of health disparities based on social risk factors and race and ethnicity more comprehensive and actionable for hospitals, providers, and patients. The following is part of an ongoing effort across CMS to evaluate appropriate initiatives to reduce health disparities. Feedback will be used to inform the creation of a future, comprehensive, RFI focused on closing the health equity gap in CMS programs and policies (86 FR 25554 through 255561).

Belonging to a racial or ethnic minority group; living with a disability; being a member of the lesbian, gay, bisexual, transgender, and queer (LGBTQ+) community; living in a rural area; or being near or below the poverty level, is often associated with worse health outcomes.<sup>143 144 145 146 147 148 149 150</sup>

<sup>142</sup> Ochieng N., Cubanski J., Neuman T., Artiga S., Damico A. Racial and Ethnic Health Inequities and Medicare. KFF. February 2021.

<sup>143</sup> Joynt K.E., Orav E., Jha A.K. Thirty-Day Readmission Rates for Medicare Beneficiaries by Race and Site of Care. JAMA. 2011;305(7):675–681.

<sup>144</sup> Lindenaue P.K., Lagu T., Rothberg M.B., et al. Income Inequality and 30 Day Outcomes After Acute Myocardial Infarction, Heart Failure, and Pneumonia: Retrospective Cohort Study. British Medical Journal. 2013;346.

<sup>145</sup> Trivedi A.N., Nsa W., Hausmann LRM., et al. Quality and Equity of Care in U.S. Hospitals. New

Such disparities in health outcomes are the result of number of factors, but importantly for CMS programs, although not the sole determinant, poor access and provision of lower quality health care contribute to health disparities. For instance, numerous studies have shown among Medicare beneficiaries, racial and ethnic minority individuals often receive lower quality of care, report lower experiences of care, and experience more frequent hospital readmissions and procedural complications.<sup>151 152 153 154 155 156</sup>

We are committed to achieving equity in health care outcomes for Medicare beneficiaries by supporting providers in quality improvement activities to reduce health inequities, enabling them to make more informed decisions, and promoting provider accountability for health care disparities.<sup>157</sup> For the purposes of this rule, we are using a definition of equity established in Executive Order 13985, issued on January 25, 2021, as “the consistent and

England Journal of Medicine. 2014;371(24):2298–2308.

<sup>146</sup> Polyakova, M., et al. Racial Disparities In Excess All-Cause Mortality During The Early COVID-19 Pandemic Varied Substantially Across States. Health Affairs. 2021; 40(2): 307–316.

<sup>147</sup> Rural Health Research Gateway. Rural Communities: Age, Income, and Health Status. Rural Health Research Recap. November 2018.

<sup>148</sup> [https://www.minorityhealth.hhs.gov/assets/PDF/Update\\_HHS\\_Disparities\\_Dept-FY2020.pdf](https://www.minorityhealth.hhs.gov/assets/PDF/Update_HHS_Disparities_Dept-FY2020.pdf).

<sup>149</sup> [www.cdc.gov/mmwr/volumes/70/wr/mm7005a1.htm](http://www.cdc.gov/mmwr/volumes/70/wr/mm7005a1.htm).

<sup>150</sup> Poteat T.C., Reisner S.L., Miller M., Wirtz A.L. COVID-19 Vulnerability of Transgender Women With and Without HIV Infection in the Eastern and Southern U.S. Preprint. medRxiv. 2020;2020.07.21.20159327. Published 2020 Jul 24. doi:10.1101/2020.07.21.20159327.

<sup>151</sup> Martino, S.C., Elliott, M.N., Dembosky, J.W., Hambarsoomian, K., Burkhart, Q., Klein, D.J., Gildner, J., and Haviland, A.M. Racial, Ethnic, and Gender Disparities in Health Care in Medicare Advantage. Baltimore, MD: CMS Office of Minority Health. 2020.

<sup>152</sup> Guide to Reducing Disparities in Readmissions. CMS Office of Minority Health. Revised August 2018. Available at [https://www.cms.gov/About-CMS/Agency-Information/OMH/Downloads/OMH\\_Readmissions\\_Guide.pdf](https://www.cms.gov/About-CMS/Agency-Information/OMH/Downloads/OMH_Readmissions_Guide.pdf).

<sup>153</sup> Singh J.A., Lu X., Rosenthal G.E., Ibrahim S., Cram P. Racial disparities in knee and hip total joint arthroplasty: An 18-year analysis of national Medicare data. Ann Rheum Dis. 2014 Dec;73(12):2107–15.

<sup>154</sup> Rivera-Hernandez M., Rahman M., Mor V., Trivedi A.N. Racial Disparities in Readmission Rates among Patients Discharged to Skilled Nursing Facilities. J Am Geriatr Soc. 2019 Aug;67(8):1672–1679.

<sup>155</sup> Joynt K.E., Orav E., Jha A.K. Thirty-Day Readmission Rates for Medicare Beneficiaries by Race and Site of Care. JAMA. 2011;305(7):675–681.

<sup>156</sup> Tsai T.C., Orav E.J., Joynt K.E. Disparities in surgical 30-day readmission rates for Medicare beneficiaries by race and site of care. Ann Surg. Jun 2014;259(6):1086–1090.

<sup>157</sup> <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Quality-InitiativesGenInfo/Downloads/CMS-Quality-Strategy.pdf>.



systematic fair, just, and impartial treatment of all individuals, including individuals who belong to underserved communities who have been denied such treatment, such as Black, Latino, and Indigenous and Native American persons, Asian Americans and Pacific Islanders and other persons of color; members of religious minorities; lesbian, gay, bisexual, transgender, and queer (LGBTQ+) persons; persons with disabilities; persons who live in rural areas; and persons otherwise adversely affected by persistent poverty or inequality.”<sup>158</sup> We note this definition was recently established and provides a useful, common definition for equity across different areas of government, although numerous other definitions of equity exist.

Our ongoing commitment to closing the equity gap in CMS quality programs is demonstrated by a portfolio of programs aimed at making information on the quality of health care providers and services, including disparities, more transparent to consumers and providers. The CMS Equity Plan for Improving Quality in Medicare outlines a path to equity which aims to support Quality Improvement Network Quality Improvement Organizations (QIN-QIOs); federal, state, local, and tribal organizations; providers; researchers; policymakers; beneficiaries and their families; and other stakeholders in activities to achieve health equity.<sup>159</sup> The CMS Equity Plan for Improving Quality in Medicare focuses on three core priority areas which inform our policies and programs: (1) Increasing understanding and awareness of health disparities; (2) developing and disseminating solutions to achieve health equity; and (3) implementing sustainable actions to achieve health equity.<sup>160</sup> The CMS Quality Strategy<sup>161</sup> and Meaningful Measures

Framework<sup>162</sup> also include elimination of racial and ethnic disparities as central principles. Our efforts aimed at closing the health equity gap to date have included providing transparency of health disparities, supporting providers with evidence-informed solutions to achieve health equity, and reporting to providers on gaps in quality as follows:

- The *CMS Mapping Medicare Disparities Tool* which is an interactive map which identifies areas of disparities and is a starting point to understand and investigate geographic, racial and ethnic differences in health outcomes for Medicare patients.<sup>163</sup>
- The *Racial, Ethnic, and Gender Disparities in Health Care in Medicare Advantage Stratified Report*, which highlights racial and ethnic differences in health care experiences and clinical care, compares quality of care for women and men, and looks at racial and ethnic differences in quality of care among women and men separately for Medicare Advantage plans.<sup>164</sup>
- The *Rural-Urban Disparities in Health Care in Medicare Report* which details rural-urban differences in health care experiences and clinical care.<sup>165</sup>
- The *Standardized Patient Assessment Data Elements* for certain post-acute care Quality Reporting Programs, which now includes data reporting for race and ethnicity and preferred language, in addition to screening questions for social needs (84 FR 42536 through 42588).
- The *CMS Innovation Center's Accountable Health Communities Model* which includes standardized collection of health-related social needs data.
- The *Guide to Reducing Disparities* which provides an overview of key issues related to disparities in readmissions and reviews set of activities which can help hospital leaders reduce readmissions in diverse populations.<sup>166</sup>
- The *CMS Disparity Methods* which provide hospital-level confidential

results stratified by dual eligibility for condition-specific readmission measures currently included in the Hospital Readmissions Reduction Program (see 84 FR 42496 through 42500 for a discussion of using stratified data in additional measures).

These programs are informed by reports by the National Academies of Science, Engineering and Medicine (NASEM)<sup>167</sup> and the Office of the Assistant Secretary for Planning and Evaluation (ASPE)<sup>168</sup> which have examined the influence of social risk factors on several of our quality programs. In this RFI, we discuss initiatives specific to further bridging the health equity gap within the MIPS track of the Quality Payment Program.

In Appendix 2: Improvement Activities of this proposed rule, we discuss a proposed improvement activity titled “create and implement an anti-racism plan”. This improvement activity acknowledges it is insufficient to gather and analyze data by race, and document disparities by different population groups. Rather, it emphasizes systemic racism is the root cause for differences in health outcomes between socially defined racial groups. Further, we also propose to modify five existing improvement activities to address health equity. We note that some improvement activities within our current Inventory already aim to improve equity. We believe further modifying them can more explicitly link the activity to health equity without changing the core activity. In other cases, our proposals to modify an activity fundamentally shifts the activity to focus on health equity specifically.

Additionally, in section IV.A.3.e.(2) of this proposed rule, we are proposing to update the complex patient bonus formula. We specifically refer to ASPE's second report, Social Risk and Performance in Medicare's Value-Based Purchasing Programs, which was publicly-released in May 2020.<sup>169</sup> The second report builds on the analyses included in the initial report and provides additional insight for addressing risk factors in MIPS and other value-based payment programs. More specifically, the report has a 3-

<sup>158</sup> <https://www.federalregister.gov/documents/2021/01/25/2021-01753/advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government>.

<sup>159</sup> Centers for Medicare & Medicaid Services Office of Minority Health. The CMS Equity Plan for Improving Quality in Medicare. 2015–2021. [https://www.cms.gov/About-CMS/Agency-Information/OMH/OMH\\_Dwnld-CMS\\_EquityPlanforMedicare\\_090615.pdf](https://www.cms.gov/About-CMS/Agency-Information/OMH/OMH_Dwnld-CMS_EquityPlanforMedicare_090615.pdf).

<sup>160</sup> Centers for Medicare & Medicaid Services Office of Minority Health. The CMS Equity Plan for Improving Quality in Medicare. [https://www.cms.gov/About-CMS/Agency-Information/OMH/OMH\\_Dwnld-CMS\\_EquityPlanforMedicare\\_090615.pdf](https://www.cms.gov/About-CMS/Agency-Information/OMH/OMH_Dwnld-CMS_EquityPlanforMedicare_090615.pdf).

<sup>161</sup> Centers for Medicare & Medicaid Services. CMS Quality Strategy. 2016. <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/QualityInitiativesGenInfo/Downloads/CMS-Quality-Strategy.pdf>.

<sup>162</sup> <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Quality-InitiativesGenInfo/MMF/General-info-Sub-Page>.

<sup>163</sup> <https://www.cms.gov/About-CMS/Agency-Information/OMH/OMH-Mapping-Medicare-Disparities>.

<sup>164</sup> <https://www.cms.gov/About-CMS/Agency-Information/OMH/research-and-data/statistics-and-data/stratified-reporting>.

<sup>165</sup> Centers for Medicare & Medicaid Services. Rural-Urban Disparities in Health Care in Medicare. 2019. <https://www.cms.gov/About-CMS/Agency-Information/OMH/Downloads/Rural-Urban-Disparities-in-Health-Care-in-Medicare-Report.pdf>.

<sup>166</sup> Guide to Reducing Disparities in Readmissions. CMS Office of Minority Health. Revised August 2018. Available at [https://www.cms.gov/About-CMS/Agency-Information/OMH/Downloads/OMH\\_Readmissions\\_Guide.pdf](https://www.cms.gov/About-CMS/Agency-Information/OMH/Downloads/OMH_Readmissions_Guide.pdf).

<sup>167</sup> National Academies of Sciences, Engineering, and Medicine. 2016. Accounting for Social Risk Factors in Medicare Payment: Identifying Social Risk Factors. Washington, DC: The National Academies Press. <https://doi.org/10.17226/21858>.

<sup>168</sup> <https://aspe.hhs.gov/pdf-report/report-congress-social-risk-factors-and-performance-under-medicare-value-based-purchasing-programs>.

<sup>169</sup> Social Risk and Performance in Medicare's Value-Based Purchasing Programs. ASPE Second Report. May 2020. <https://aspe.hhs.gov/pdf-report/second-impact-report-to-congress>.

**Table A: Proposed New Improvement Activities for the MIPS CY 2022 Performance Period/2024 MIPS Payment Year and Future Years**

<b>New Improvement Activity</b>	
<b>Proposed Activity ID:</b>	<b>IA_AHE_XX</b>
<b>Proposed Subcategory:</b>	Achieving Health Equity
<b>Proposed Activity Title:</b>	Create and Implement an Anti-Racism Plan
<b>Proposed Activity Description:</b>	<p>Create and implement an anti-racism plan using the <u>CMS Disparities Impact Statement or other anti-racism planning tools</u>.<sup>1</sup> The plan should include a clinic-wide review of existing tools and policies, such as value statements or clinical practice guidelines, to ensure that they include and are aligned with a commitment to anti-racism and an understanding of race as a political and social construct, not a physiological one.</p> <p>The plan should also identify ways in which issues and gaps identified in the review can be addressed and should include target goals and milestones for addressing prioritized issues and gaps. This may also include an assessment and drafting of an organization's plan to prevent and address racism and/or improve language access and accessibility to ensure services are accessible and understandable for those seeking care. The clinician or practice can also consider including in their plan ongoing training on anti-racism and/or other processes to support identifying explicit and implicit biases in patient care and addressing historic health inequities experienced by people of color. More information about elements of the CMS Disparities Impact Statement is detailed in the template and action plan document at <a href="https://www.cms.gov/About-CMS/Agency-Information/OMH/Downloads/Disparities-Impact-Statement-508-rev102018.pdf">https://www.cms.gov/About-CMS/Agency-Information/OMH/Downloads/Disparities-Impact-Statement-508-rev102018.pdf</a>.</p>
<b>Proposed Weighting:</b>	High
<b>Rationale:</b>	<p>This proposed activity aims to address systemic inequities, including systemic racism, as called for in Executive Order 13985: Advancing Racial Equity and Support for Underserved Communities Through the Federal Government, published January 20, 2021.<sup>2</sup> This activity begins with the premise that it is important to acknowledge systemic racism as a root cause for differences in health outcomes between socially-defined racial groups.<sup>3,4</sup></p> <p>We believe this activity has the potential to improve clinical practice or care delivery and is likely to result in improved outcomes, per the improvement activity definition at § 414.1305, because it supports clinicians in identifying health disparities and implementing processes to reduce racism and provide equitable quality health care. This activity is intended to help clinicians move beyond analyzing data to taking real steps to naming and eliminating the causes of the disparities identified. We also propose making this activity high-weighted because clinicians will need considerable time and resources to develop a thorough anti-racism plan that is informed by data, and to implement it throughout the practice or system. See the definition for high weighting in the CY 2019 PFS final rule (83 FR 59780 through 59781).</p>
<b>New Improvement Activity</b>	
<b>Proposed Activity ID:</b>	<b>IA_AHE_XX</b>
<b>Proposed Subcategory:</b>	Achieving Health Equity
<b>Proposed Activity Title:</b>	Implement Food Insecurity and Nutrition Risk Identification and Treatment Protocols

**Appendix 2: Improvement Activities**

**Note:** In this proposed rule, for the 2022 MIPS performance/2024 MIPS

payment year and future years, we are proposing to add 7 new improvement activities, modify 15 previously adopted improvement activities, and remove 6

previously adopted improvement activities. These proposals are discussed in detail below. We request comments on our proposals.



Proposed Activity Description:	<p>Create or improve, and then implement, protocols for identifying and providing appropriate support to: a) patients with or at risk for food insecurity, and b) patients with or at risk for poor nutritional status. (Poor nutritional status is sometimes referred to as clinical malnutrition or undernutrition and applies to people who are overweight and underweight.) Actions to implement this improvement activity may include, but are not limited to, the following:</p> <ul style="list-style-type: none"> <li>• Use Malnutrition Quality Improvement Initiative (MQii) or other quality improvement resources and standardized screening tools to assess and improve current food insecurity and nutritional screening and care practices.</li> <li>• Update and use clinical decision support tools within the clinician's electronic medical record to align with the new food insecurity and nutrition risk protocols.</li> <li>• Update and apply requirements for staff training on food security and nutrition.</li> <li>• Update and provide resources and referral lists, and/or engage with community partners to facilitate referrals for patients who are identified as at risk for food insecurity or poor nutritional status during screening.</li> </ul> <p>Activities must be focused on patients at greatest risk for food insecurity and/or malnutrition—for example patients with low income who live in areas with limited access to affordable fresh food, or who are isolated or have limited mobility.</p>
Proposed Weighting:	Medium
Rationale:	<p>Food insecurity is a widespread and worsening issue in the United States. Estimates indicate that the number of food insecure people in the United States increased from 35.2 million people (1 in 9 people) in 2019 to 45 million people (1 in 7 people) in 2020.<sup>5</sup> Older adults are particularly at risk because of low income, mobility issues, dementia, and other factors such as social isolation. Food insecurity also disproportionately affects Black and Latinx households.<sup>6</sup></p> <p>Malnutrition is also widespread in the United States.<sup>7</sup> Both food insecurity and malnutrition are associated with worse health outcomes and higher spending on healthcare.<sup>8</sup> For example, adults who are malnourished at the time of hospitalization or surgery are more likely to have worse hospitalization, surgical, and recovery outcomes.<sup>8</sup></p> <p>The improvement activity fills a gap in the inventory, which does not currently include an improvement activity related to food insecurity or malnutrition. We believe this activity has the potential to improve clinical practice or care delivery and is likely to result in improved outcomes, because ameliorating food insecurity and malnutrition leads to better health outcomes.<sup>9,10</sup> This activity creates an opportunity for clinicians to help address food insecurity and malnutrition, and provides the Malnutrition Quality Improvement Initiative as a resource.<sup>11</sup> Evidence indicates that they can help patients by increasing enrollment in the Supplemental Nutrition Assistance Program (SNAP) (<a href="https://www.fns.usda.gov/snap/supplemental-nutrition-assistance-program">https://www.fns.usda.gov/snap/supplemental-nutrition-assistance-program</a>), which is associated with reduced food insecurity<sup>12</sup> or connecting their patients to other community resources. This activity also creates an opportunity for clinicians to help address malnutrition by ensuring patients in need receive a detailed nutritional assessment and appropriate nutritional care.</p> <p>We propose weighting this activity medium, because this activity may be accomplished by providing literature and/or facilitating a conversation with a patient during a regular visit. The estimated level of effort for clinicians is comparable to other medium-weighted activities in the inventory, and less than that of high-weighted activities. See the definition of medium weighting in the CY 2019 PFS final rule (83 FR 59780 through 59781).</p>
<b>New Improvement Activity</b>	
Proposed Activity ID:	IA_BMH_XX
Proposed Subcategory:	Behavioral and Mental Health



Proposed Activity Title:	Implementation of a Trauma-Informed Care (TIC) Approach to Clinical Practice
Proposed Activity Description:	<p>Create and implement a plan for trauma-informed care (TIC) that recognizes the potential impact of trauma experiences on patients and takes steps to mitigate the effects of adverse events in order to avoid re-traumatizing or triggering past trauma. Actions in this plan may include, but are not limited to, the following:</p> <ul style="list-style-type: none"> <li>• Incorporate trauma-informed training into new employee orientation</li> <li>• Offer annual refreshers and/or trainings for all staff</li> <li>• Recommend and supply TIC materials to third party partners, including care management companies and billing services</li> <li>• Identify patients using a screening methodology</li> <li>• Flag charts for patients with one or more adverse events that might have caused trauma</li> <li>• Use ICD-10 diagnosis codes for adverse events when appropriate</li> </ul> <p>TIC is a strengths-based healthcare delivery approach that emphasizes physical, psychological, and emotional safety for both trauma survivors and their providers.<sup>13</sup> Core components of a TIC approach are: awareness of the prevalence of trauma; understanding of the impact of past trauma on services utilization and engagement; and a commitment and plan to incorporate that understanding into training, policy, procedure, and practice.<sup>14</sup></p>
Proposed Weighting:	Medium
Rationale:	<p>We propose this activity because the psychological impact of trauma influences the clinical care needs of a large population in the United States and adopting a TIC approach can help all clinicians avoid retraumatizing affected patients and support providers and staff who have experienced trauma themselves.<sup>15</sup> Research indicates that clinicians have a positive view of TIC but need more resources and support to apply the concepts to practice.<sup>16</sup></p> <p>For the purposes of this proposed improvement activity, trauma is the experience of a harmful or life-threatening event or series of events and their longer-term psychological impact, which can include development of post-traumatic stress disorder (PTSD) and changes to brain functioning and even genetics.<sup>17</sup> Approximately 60 percent of men and 50 percent of women in the U.S. have experienced trauma in their lifetimes and 7-8 percent of the population will have PTSD at some point in their lives.<sup>18</sup> Multi-generational trauma, whereby experiences that traumatized earlier generations, such as the genocide of Native American tribes, are passed down, impact many families and communities.<sup>19</sup> Clinicians (and not just mental health clinicians) who take a TIC approach anticipate and avoid institutional processes and individual practices that are likely to retraumatize individuals who have histories of trauma.<sup>20</sup> We believe this activity has the potential to improve clinical practice or care delivery and is likely to result in improved outcomes, because trauma-informed approaches in healthcare are associated with improved outcomes for patients.<sup>21</sup></p> <p>We propose weighting this activity medium, because this activity may be accomplished by conducting a training, providing resources, or incorporating new procedures into a clinician's practice. The estimated level of effort for clinicians is comparable to other medium-weighted activities in the inventory, and less than that of high-weighted activities. See the definition of medium weighting in the CY 2019 PFS final rule (83 FR 59780 through 59781).</p>
<b>New Improvement Activity</b>	
Proposed Activity ID:	IA_BMH_XX
Proposed Subcategory:	Behavioral and Mental Health
Proposed Activity Title:	Promoting Clinician Well-Being
Proposed Activity Description:	Develop and implement programs to support clinician well-being and resilience—for example, through relationship-building opportunities, leadership development plans, or



	<p>creation of a team within a practice to address clinician well-being—using one of the following approaches:</p> <ul style="list-style-type: none"> <li>• Completion of clinician survey on clinician well-being with subsequent implementation of an improvement plan based on the results of the survey.</li> <li>• Completion of training regarding clinician well-being with subsequent implementation of a plan for improvement.</li> </ul>
Proposed Weighting:	High
Rationale:	<p>We believe this activity will help clinicians prioritize and improve their own well-being and the well-being of their staff and colleagues. Focusing on improving clinician well-being is especially critical now, given the stress that the COVID-19 public health emergency has exerted on clinicians. Many organizations, including the National Academies of Sciences, Engineering, and Medicine,<sup>22</sup> have prioritized interventions to improve clinician well-being. Studies indicate that clinician burnout, including emotional exhaustion, depersonalization, and reduced personal accomplishment, is associated with poorer quality healthcare and reduced safety for patients.<sup>23, 24</sup> Studies also indicate that some interventions have been shown to reduce burnout and improve well-being.<sup>25</sup></p> <p>This improvement activity fills a gap because the inventory does not currently include an improvement activity related to clinician well-being. We believe this activity has the potential to improve clinical practice or care delivery and is likely to result in improved outcomes, because promoting clinician well-being and mitigating burnout leads to better quality health care and increased patient safety.<sup>25</sup></p> <p>Given the impact of the COVID-19 pandemic on the medical community and the considerable time and resources required to mitigate its effects and promote well-being among clinicians, we believe that this activity should be weighted as high, in alignment with our definition in the CY 2019 PFS final rule (83 FR 59780 through 59781).</p>
<b>New Improvement Activity</b>	
Proposed Activity ID:	IA_ERP_XX
Proposed Subcategory:	Emergency Response and Preparedness
Proposed Activity Title:	Implementation of a Personal Protective Equipment (PPE) Plan
Proposed Activity Description:	<p>Implement a plan to acquire, store, maintain, and replenish supplies of personal protective equipment (PPE) for all clinicians or other staff who are in physical proximity to patients.</p> <p>In accordance with guidance from the Centers for Disease Control and Prevention (CDC) the PPE plan should address:</p> <ul style="list-style-type: none"> <li>• Conventional capacity: PPE controls that should be implemented in general infection prevention and control plans in healthcare settings, including training in proper PPE use.</li> <li>• Contingency capacity: actions that may be used temporarily during periods of expected PPE shortages.</li> <li>• Crisis capacity: strategies that may need to be considered during periods of known PPE shortages.</li> </ul> <p>The PPE plan should address all of the following types of PPE:</p> <ul style="list-style-type: none"> <li>• Standard precautions (e.g., hand hygiene, prevention of needle-stick or sharps injuries, safe waste management, cleaning and disinfection of the environment)</li> <li>• Eye protection</li> <li>• Gowns (including coveralls or aprons)</li> <li>• Gloves</li> <li>• Facemasks</li> <li>• Respirators (including N95 respirators)</li> </ul>
Proposed Weighting:	Medium
Rationale:	<p>The COVID-19 pandemic illustrated the importance of maintaining adequate PPE supplies for caregivers. Especially early in the pandemic, inadequate PPE supplies reduced access to care and exposed healthcare workers to unnecessary risk.<sup>26</sup></p>

	<p>While clinicians may be following surge capacity procedures, they may not have a written plan for both preventing and preparing for surge capacity. In a survey conducted in mid-March of 2020, over 50 percent of physician practices cited a lack of supplies as an obstacle to caregiving.<sup>27</sup> Also, in a 2009 survey of American College of Emergency Physician Disaster Medicine Section members, fewer than 75 percent of respondents indicated that their emergency department had a plan for responding to pandemic influenza and other infectious disease threats.<sup>28</sup> This proposed improvement activity is based on the CDC guidelines for optimizing PPE supplies<sup>29</sup> and aligns with World Health Organization guidelines.<sup>30</sup></p> <p>We believe that including this improvement activity in the inventory would encourage formalizing the process for creating a PPE plan, training staff, and ensuring adequate PPE inventory. Thus, it has the potential to improve clinical practice or care delivery and is likely to result in improved outcomes, because both clinicians and their patients will be safer when responding to epidemics, reducing the transmission of viruses and allowing clinicians to provide patients with appropriate care because supplies are available.</p> <p>We propose that this activity should be weighted as medium, because it may be accomplished by conducting a training, providing resources, or incorporating new procedures into a clinician's practice. The estimated level of effort for clinicians is comparable to other medium-weighted activities in the inventory, and less than that of high-weighted activities. See the definition of medium weighting in the CY 2019 PFS final rule (83 FR 59780 through 59781).</p>
<b>New Improvement Activity</b>	
<b>Proposed Activity ID:</b>	<b>IA_ERP_XX</b>
<b>Proposed Subcategory:</b>	Emergency Response and Preparedness
<b>Proposed Activity Title:</b>	Implementation of a Laboratory Preparedness Plan
<b>Proposed Activity Description:</b>	<p>Develop, implement, update, and maintain a preparedness plan for a laboratory intended to support continued or expanded patient care during COVID-19 or another public health emergency. The plan should address how the laboratory would maintain or expand patient access to health care services to improve beneficiary health outcomes and reduce healthcare disparities.</p> <p>For laboratories without a preparedness plan, clinicians would meet with stakeholders, record minutes, and document a preparedness plan, as needed. The laboratory must then implement the steps identified in the plan and maintain them.</p> <p>For laboratories with existing preparedness plans, clinicians should review, revise, or update the plan as necessary to meet the needs of the current PHE, implement new procedures, and maintain the plan.</p> <p>Maintenance of the plan in this activity could include additional hazard assessments, drills, training, and/or developing checklists to facilitate execution of the plan. Participation in debriefings to evaluate the effectiveness of plans are additional examples of engagement in this activity.</p>
<b>Proposed Weighting:</b>	Medium
<b>Rationale:</b>	<p>The COVID-19 pandemic demonstrated a need for many laboratories to develop and implement protocols to respond to the public health emergencies, as an increase in demand (due to a surge in COVID testing) and reduced staffing (due to needing to maintain distancing and other factors, such as childcare becoming unavailable) compromised laboratory functioning.<sup>31</sup></p> <p>We believe that including this improvement activity in the inventory would encourage formalizing, updating, and maintaining preparedness plans to better equip laboratories to address another public health emergency, as well as other disasters such as floods, fires, or other emergencies. Such a plan will allow laboratory staff to respond and</p>



	<p>maintain operations during emergency situations. Thus, it has the potential to improve clinical practice or care delivery and is likely to result in improved outcomes, because if needed laboratory services increase with the surge in demand, staff will be prepared to meet those needs.</p> <p>We propose weighting this activity medium, because this activity may be accomplished by developing a plan and training staff on that plan. The estimated level of effort for clinicians is comparable to other medium-weighted activities in the inventory, and less than that of high-weighted activities. See the definition of medium weighting in the CY 2019 PFS final rule (83 FR 59780 through 59781).</p>
<b>New Improvement Activity</b>	
<b>Proposed Activity ID:</b>	IA_PSPA_XX
<b>Proposed Subcategory:</b>	Patient Safety and Practice Assessment
<b>Proposed Activity Title:</b>	Application of CDC's Training for Healthcare Providers on Lyme Disease
<b>Proposed Activity Description:</b>	Apply the Centers for Disease Control and Prevention's (CDC) Training for Healthcare Providers on Lyme Disease using clinical decision support (CDS). CDS for Lyme disease should be built directly into the clinician workflow and support decision making for a specific patient at the point of care. Specific examples of how the guideline could be incorporated into a CDS workflow include but are not limited to: electronic health record (EHR) based prescribing prompts, order sets that require review of guidelines before prescriptions can be entered, and prompts requiring review of guidelines before a subsequent action can be taken in the record.
<b>Proposed Weighting:</b>	Medium
<b>Rationale:</b>	<p>Lyme disease has a high burden of disease, with approximately 476,000 cases diagnosed and treated annually. Additionally, the places where Lyme disease is common is expanding.<sup>32</sup></p> <p>We believe that including this improvement activity in the inventory would increase knowledge about Lyme disease. The CDC has developed a training course to support clinicians in identifying and treating Lyme disease, and this course would provide foundational knowledge to incorporate Lyme disease diagnosis and treatment into the workflow using CDS.<sup>33</sup> It has the potential to improve clinical practice and care delivery and is likely to result in improved outcomes; additional education to improve Lyme disease testing, ordering, and reporting systems are likely to improve patient care, reduce errors, and result in better Lyme disease-related outcomes.<sup>34, 35, 36</sup></p> <p>We propose weighting this activity medium because this activity may be accomplished by conducting a training and incorporating new procedures into a clinician's practice. The estimated level of effort for clinicians is comparable to other medium-weighted activities in the inventory, and less than that of high-weighted activities. See the definition of medium weighting in the CY 2019 PFS final rule (83 FR 59780 through 59781).</p>

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**Table B: Proposed Changes to Previously Adopted Improvement Activities for the 2022 MIPS Performance Period/2024 MIPS Payment Year and Future Years**

Current Improvement Activity	
<b>Current Activity ID:</b>	<b>IA_AHE_1</b>
<b>Current Subcategory:</b>	Achieving Health Equity
<b>Current Activity Title:</b>	Engagement of new Medicaid patients and follow-up
<b>Current Activity Description:</b>	Seeing new and follow-up Medicaid patients in a timely manner, including individuals dually eligible for Medicaid and Medicare. A timely manner is defined as within 10 business days for this activity.
<b>Current Weighting:</b>	Medium
<b>Proposed Change and Rationale:</b>	<p>This improvement activity was originally finalized in the CY 2017 Quality Payment Program final rule (81 FR 77825). The proposed modified activity would continue to address the important objective of providing timely care to Medicaid patients, but also expand the target population to include all patients who are underserved and may face barriers to timely access to appropriate care. We also propose modifying the description so that, instead of stating patients should receive follow-up in a “timely manner,” defined as within 10 business days, clinicians would use their own time-to-treat data (i.e., data measuring the time between clinician identifying a need for an appointment and the patient having a scheduled appointment) to ensure that patients receive follow-up within standard guidelines and create, implement and monitor an approach for improvement in engagement in care. We want to broaden the description, because the amount of time that is clinically relevant for a follow up visit varies widely,<sup>1</sup> and therefore, setting a specific definition of “timely manner” may not be clinically appropriate for all patients. The proposed modification acknowledges this variation and encourages clinicians to use their own time-to-treat data and standard practice guidelines to enhance engagement.</p> <p>The proposed modified activity describes that this approach to improving engagement in care may include screening for treatment barriers, especially transportation barriers, and providing resources to patients who need assistance, including access to federally-mandated Medicaid transportation benefits. Lack of suitable transportation can pose a barrier to accessing needed care for many underserved patients—particularly for those who are elderly, disabled, or low-income.<sup>2</sup> As finalized in federal regulation (42 CFR 431.53 and 440.170), Medicaid beneficiaries are eligible for the non-emergency medical transportation benefit, which assures transportation to and from non-emergency medical care for those without other options.<sup>3</sup> This activity is intended to encourage clinicians to direct Medicaid beneficiaries and other underserved patients to access resources to reduce barriers to their timely access of needed care and ultimately help them achieve better health outcomes.</p> <p>We believe that participation in the modified version of this improvement activity would be more likely to result in improved outcomes, because it creates more flexibility around the timeline for follow-up by using time-to-treat data, specifies that these data guide an approach for patient engagement, and addresses a broader range of underserved populations.</p>
<b>Proposed Revised Activity Title</b>	Enhance Engagement of Medicaid and Other Underserved Populations
<b>Proposed Revised Activity Description:</b>	To improve responsiveness of care for Medicaid and other underserved patients: use time-to-treat data (i.e., data measuring the time between clinician identifying a need for an appointment and the patient having a scheduled appointment) to identify patterns by which care or engagement with Medicaid patients or other groups of underserved patients has not achieved standard practice guidelines; and with this information, create, implement, and monitor an approach for improvement. This approach may include screening for patient barriers to treatment, especially transportation barriers, and providing resources to improve engagement (e.g., state Medicaid non-emergency medical transportation benefit).
Current Improvement Activity	
<b>Current Activity ID:</b>	<b>IA_AHE_5</b>



Current Subcategory:	Achieving Health Equity
Current Activity Title:	MIPS Eligible Clinician Leadership in Clinical Trials or Community-Based Participatory Research (CBPR)
Current Activity Description:	MIPS eligible clinician leadership in clinical trials, research alliances or community-based participatory research (CBPR) that identify tools, research or processes that can focus on minimizing disparities in healthcare access, care quality, affordability, or outcomes.
Current Weighting:	Medium
Proposed Change and Rationale:	<p>This improvement activity was originally finalized in the CY 2018 Quality Payment Program final rule (82 FR 54175). This proposed modification would add as an explicit option that the research could focus on addressing health-related social needs as drivers of health. Risks for health-related social needs are more acute and widespread in underserved communities.<sup>4</sup> These risks are linked to worse health outcomes and addressing them can reduce costs.<sup>5</sup> The modification would also change verbiage in ways that clarify the activity, but do not affect the intent of the activity.</p> <p>The health-related social needs included in the proposed modification are aligned with our Accountable Health Communities (AHC) Model (<a href="https://innovation.cms.gov/innovation-models/ahcm">https://innovation.cms.gov/innovation-models/ahcm</a>), which looks at the impact of identifying and addressing patients' health-related social needs on their health outcomes. AHC has prioritized five areas of health-related social needs, namely: food insecurity, housing insecurity, transportation, utilities, and interpersonal safety.<sup>6</sup> These areas were selected as priority, because there is high-quality evidence linking it with poor health or increased health care utilization and cost, there are community providers who can help meet the need, and health care providers are not yet comprehensively screening for or addressing these needs.<sup>7</sup> We propose to modify this improvement activity to identify the same five health-related social needs prioritized in the AHC Model as potential areas of research.</p> <p>Criteria for selecting new improvement activities, which we are proposing to update in section IV.A.3.d.(3)(c)(i), align with those used for prioritizing health-related social needs. With this modification, this improvement activity would become more explicitly a part of our plan to help clinicians provide patient-centered care to patients who have complex and multi-faceted needs. We believe that participation in the modified version of this improvement activity would be more likely to result in improved outcomes, because it explicitly includes research into health-related social needs, which are central to understanding and addressing disparities in achieving positive health outcomes. We believe that we will achieve the objectives of the Quality Payment Program—specifically, to improve beneficiary population health, to improve the care received by Medicare beneficiaries, and to lower costs to the Medicare program—by helping address health-related social needs.</p>
Proposed Revised Activity Description:	Lead clinical trials, research alliances, or community-based participatory research (CBPR) that identify tools, research, or processes that focus on minimizing disparities in healthcare access, care quality, affordability, or outcomes. Research could include addressing health-related social needs like food insecurity, housing insecurity, transportation barriers, utility needs, and interpersonal safety.
<b>Current Improvement Activity</b>	
Current Activity ID:	IA_BE_1
Current Subcategory:	Beneficiary Engagement
Current Activity Title:	Use of certified EHR to capture patient reported outcomes
Current Activity Description:	In support of improving patient access, performing additional activities that enable capture of patient reported outcomes (e.g., home blood pressure, blood glucose logs, food diaries, at-risk health factors such as tobacco or alcohol use, etc.) or patient activation measures through use of certified EHR technology, containing this data in a separate queue for clinician recognition and review.
Current Weighting:	Medium
Proposed Change and Rationale:	This improvement activity was originally finalized in the CY 2017 Quality Payment Program final rule (81 FR 77825). We propose to modify the activity by replacing examples of patient reported outcomes with current industry standards — functional status, symptoms and symptom burden, health behaviors, and patient experience.



	<p>We also propose to include a definition for patient activation<sup>8</sup> -- measures of patient involvement in their care -- to improve clarity of the activity.</p> <p>Finally, we also propose to simplify the wording in ways that clarify the activity but do not affect the purpose. These proposed modifications would improve the accuracy, applicability, and clarity of the activity. We believe that participation in the modified version of this improvement activity would be more likely to result in improved outcomes, because it promotes clarity by providing more accurate and current industry standard patient reported outcomes.</p>
Proposed Revised Activity Description:	To improve patient access, perform activities beyond routine care that enable capture of patient reported outcomes (e.g., related to functional status, symptoms and symptom burden, health behaviors, or patient experience) or patient activation measures (i.e., measures of patient involvement in their care) through use of certified electronic health record technology, and record these outcomes data for clinician review.
<b>Current Improvement Activity</b>	
Current Activity ID:	IA_BE_6
Current Subcategory:	Beneficiary Engagement
Current Activity Title:	Collection of and follow-up on patient experience and satisfaction data on beneficiary engagement
Current Activity Description:	Collection of and follow-up on patient experience and satisfaction data on beneficiary engagement, including development of improvement plan.
Current Weighting:	High
Proposed Change and Rationale:	<p>This improvement activity was originally finalized in the CY 2017 Quality Payment Program final rule (81 FR 77825). We are proposing to combine multiple activities into this IA-BE-6 improvement activity to remove overlapping content and improve the applicability and ease of use.</p> <p>In addition to this activity, the previously adopted BE_13 (81 FR 77825) and PSPA_11 (81 FR 77825) improvement activities also require the collection of patient experience and satisfaction data with the objective of increasing patient-centeredness of care. The previously adopted activity descriptions are as follows:</p> <ul style="list-style-type: none"> <li>• IA_BE_13: Regularly assess the patient experience of care through surveys, advisory councils and/or other mechanisms.</li> <li>• IA_PSPA_11: Participation in the Consumer Assessment of Healthcare Providers and Systems Survey (CAHPS) or other supplemental questionnaire items (e.g., Cultural Competence or Health Information Technology supplemental item sets)</li> </ul> <p>We propose to modify IA_BE_6 to include additional detail covering the unique content of IA_BE_13 and IA_PSPA_11. Specifically, we propose to add surveys such as CAHPS, advisory councils, and other mechanisms in the modified version of BE_6 as options for tools used for collecting the patient experience data.</p> <p>We also propose to update the title of the improvement activity to better reflect the full scope of the revised activity description.</p> <p>We also propose to add language that would encourage clinicians to consider the linguistic needs of their population, so that the satisfaction survey results can include the perspectives of patient groups who may not feel comfortable taking a survey in English.</p>
Proposed Revised Title:	Regularly Assess Patient Experience of Care and Follow Up on Findings
Proposed Revised Activity Description:	Collect and follow up on patient experience and satisfaction data. This activity also requires follow-up on findings of assessments, including the development and implementation of improvement plans. To fulfill the requirements of this activity, eligible clinicians can use surveys (e.g., Consumer Assessment of Healthcare Providers and Systems Survey), advisory councils, or other mechanisms. Clinicians may consider implementing patient surveys in multiple languages, based on the needs of their patient population.



Current Improvement Activity	
Current Activity ID:	IA_BE_16
Current Subcategory:	Beneficiary Engagement
Current Activity Title:	Evidence-based techniques to promote self-management into usual care
Current Activity Description:	Incorporate evidence-based techniques to promote self-management into usual care, using techniques such as goal setting with structured follow-up, Teach Back, action planning or motivational interviewing.
Current Weighting:	Medium
Proposed Change and Rationale:	<p>This improvement activity was originally finalized in the CY 2017 Quality Payment Program final rule (81 FR 77825). We propose to combine this IA_BE_16 with the previously adopted IA_BE_17, IA_BE_18, IA_BE_20, and IA_BE_21 because of overlapping and duplicative content and to improve the applicability and ease of use of the inventory. The above previously adopted improvement activities included effective interventions for helping patients better engage in self-management. The previously adopted activity descriptions are as follows:</p> <ul style="list-style-type: none"> <li>• IA_BE_17: Use tools to assist patients in assessing their need for support for self-management (e.g., the Patient Activation Measure or "How's My Health"). (81 FR 77825)</li> <li>• IA_BE_18: Provide peer-led support for self-management. (81 FR 77825)</li> <li>• IA_BE_20: Provide condition-specific chronic disease self-management support programs or coaching or link patients to those programs in the community. (81 FR 77825)</li> <li>• IA_BE_21: Provide self-management materials at an appropriate literacy level and in an appropriate language. (81 FR 77825)</li> </ul> <p>We are proposing to change IA_BE_16 to include additional detail covering the unique content of IA_BE_17, IA_BE_18, IA_BE_20, and IA_BE_21. Specifically, we are proposing to add tools for self-management, peer-led support, provision of self-management materials, and retain the examples of evidence-based approaches patients better engage in self-management included in the original IA_BE_16: goal setting with structured follow-up,<sup>9</sup> Teach-back methods,<sup>10</sup> action planning,<sup>11</sup> assessment of need for self-management (e.g., the Patient Activation Measure<sup>12</sup>), and motivational interviewing<sup>13</sup> as options for tools and resources to provide patients as part of fulfilling the requirements for the activity. These tools and techniques could be particularly helpful for people with substance use disorders and individuals managing chronic physical conditions such as diabetes and heart disease<sup>14</sup>.</p> <p>We also propose to add that evidence-based techniques for promoting self-management should be culturally and linguistically tailored.</p>
Proposed Revised Activity Title:	Promote Self-management in Usual Care
Proposed Revised Activity Description:	To help patients self-manage their care, incorporate culturally and linguistically tailored evidence-based techniques for promoting self-management into usual care, and provide patients with tools and resources for self-management. Examples of evidence-based techniques to use in usual care include: goal setting with structured follow-up, Teach-back methods, action planning, assessment of need for self-management (e.g., the Patient Activation Measure), and motivational interviewing. Examples of tools and resources to provide patients directly or through community organizations include: peer-led support for self-management, condition-specific chronic disease or substance use disorder self-management programs, and self-management materials.
Current Improvement Activity	
Current Activity ID:	IA_BE_25
Current Subcategory:	Beneficiary Engagement
Current Activity Title:	Drug Cost Transparency
Current Activity Description:	To receive credit for this improvement activity, MIPS eligible clinicians must attest that their practice provides counseling to patients and/or their caregivers about the costs of drugs and the patients' out-of-pocket costs for the drugs. If appropriate, the clinician must also explore with their patients the availability of alternative drugs and patients' eligibility for patient assistance programs that provide free medications to people who cannot afford to buy their medicine. One source of information for pricing of



	pharmaceuticals could be a real-time benefit tool (RTBT), which provides to the prescriber, real-time patient-specific formulary and benefit information for drugs, including cost-sharing for a beneficiary. (CMS finalized in the Modernizing Part D and Medicare Advantage to Lower Drug Prices and Reduce Out of Pocket Expenses final rule (84 FR 23832, 23883) that beginning January 1, 2021 Medicare Part D plans will be required to implement one or more RTBT(s).)
Current Weighting:	High
Proposed Change and Rationale:	<p>This improvement activity was originally finalized in the CY 2020 PFS final rule (84 FR 63539). In the CY 2020 PFS final rule (84 FR 63515), we adopted IA BE 25, titled "Drug Cost Transparency to include requirements for use of real-time benefit tools" beginning with the 2020 performance year and for subsequent years. It allows a real-time benefit tool (RTBT) to be one source of information for pricing of pharmaceuticals, which provides to the prescriber real-time patient-specific formulary and benefit information for drugs, including cost-sharing for a beneficiary.</p> <p>The 2021 Consolidated Appropriations Act (H.R. 116-133, Pub. L. 116-260) subtitle B included section 119 "Increasing the use of real-time benefit tools to lower beneficiary costs" subsection (c) "Inclusion of Use of Real-Time Electronic Information in Shared Decision-Making Under MIPS" amended Section 1848(q)(2)(B)(iii)(IV) of the Act by adding at the end the following new sentences: "This subcategory shall include as an activity, for performance periods beginning on or after January 1, 2022, use of a real-time benefit tool as described in section 1860D-4(o). The Secretary may establish this activity as a standalone or as a component of another activity."</p> <p>In response to this amendment, in this proposed rule, we propose to modify this improvement activity such that beginning with the 2022 MIPS performance period/2024 MIPS payment year and for subsequent years the activity would require use of RTBT in order to receive credit for this activity. As previously finalized, use of RTBT is optional.</p> <p>We also propose to update the description in ways that clarify the activity, but do not affect the intent of the activity.</p> <p>We believe that requiring RTBT would make this activity more likely to reduce the costs of care. As explained in the CY 2019 Modernizing Part D final rule (84 FR 23832), RTBTs that are integrated with at least one prescriber's e-prescribing and electronic medical record systems can make beneficiary-specific drug coverage and cost information visible to prescribers. Using RTBT thus allows the prescriber and patient, when appropriate, to choose among clinically acceptable alternatives while weighing costs. By making RTBT a requirement, this modification would also require prescribers to look for alternative drugs, in contrast to the existing activity where such comparisons are optional. We believe that furthering prescription price transparency is critical to lowering overall drug costs and patients' out-of-pocket costs and improving medication adherence. Additionally, it can help advance efforts to improve patient safety, quality of care, and efficiencies and cost savings in the delivery of care.</p>
Proposed Revised Activity Description:	Provide counseling to patients and/or their caregivers regarding: costs of medications using a real time benefit tool (RTBT) which provides to the prescriber real-time patient-specific formulary and benefit information for drugs, including cost-sharing for a beneficiary
<b>Current Improvement Activity</b>	
Current Activity ID:	IA CC 14
Current Subcategory:	Care Coordination
Current Activity Title:	Practice improvements that engage community resources to support patient health goals
Current Activity Description:	<p>Develop pathways to neighborhood/community-based resources to support patient health goals that could include one or more of the following:</p> <ul style="list-style-type: none"> <li>• Maintain formal (referral) links to community-based chronic disease self-management support programs, exercise programs and other wellness resources with the potential for bidirectional flow of information; and provide a guide to available community resources.</li> <li>• Including through the use of tools that facilitate electronic communication</li> </ul>



	<p>between settings;</p> <ul style="list-style-type: none"> <li>• Screen patients for health-harming legal needs;</li> <li>• Screen and assess patients for social needs using tools that are preferably health IT enabled and that include to any extent standards-based, coded question/field for the capture of data as is feasible and available as part of such tool; and/or</li> <li>• Provide a guide to available community resources.</li> </ul>
Current Weighting:	Medium
Proposed Change and Rationale:	<p>This improvement activity was originally finalized in the CY 2017 Quality Payment Program final rule (81 FR 77825). The previously adopted improvement activity includes screening as one option to assess patients specifically for social and legal needs. We propose to modify this improvement activity to instead require screening for a range of health-related social needs using evidence-based tools before and in addition to supporting connections to community resources. We believe that screening patients using evidence-based tools can help clinicians adopt a more systematic approach to addressing health related social needs among their patient population, including effective documentation and follow-up, and avoid missing patients who have such needs. Including screening in addition to supporting connections to community resources, represents a continuum of support that clinicians can provide to patients from within the health system.</p> <p>We also propose to remove the promotion of systems for communication that have the “potential for bi-directional flow of information” and the option for using “tools that facilitate electronic communication between settings.” In many communities, the resources and programs that might best provide patients who have health-related social needs with support may not have the baseline technological capacity to engage with clinician groups in ways that eclipse basic forms of communication like phone and email.</p> <p>We also propose to add an option for using electronic health records to document screening results, trigger follow-up, and analyze data to better tailor approaches. For practices that already have processes for enabling connections to community resources established, this option would allow continued improvement and provision of more streamlined and systematized support to patients in need.</p> <p>The specific set of health-related social needs that clinicians might choose to prioritize remains part of the improvement activity, as does examples that were previously mentioned in the activity—for example, health-related legal needs. We believe that participation in the modified version of this improvement activity would be more likely to result in improved outcomes, because it requires clinicians to both screen for and address health related social needs, which are major contributors to health care access and health outcomes.</p> <p>In light of the above list of proposed changes in this modification, we are also proposing to increase the weight for this activity from medium to high. Specifically, the modifications now require screening in addition to an activity that links patients to community resources. Previously, the activity required screening <i>or</i> linkages to community. Conducting screening then devoting clinical staff time to using that data to identify and disseminate appropriate community resource information to patients takes considerable time and resources. We are proposing to increase the weight for this activity from medium to high to reflect the additional effort required, per high-weight criteria finalized in the CY 2019 PFS final rule (83 FR 59780 through 59781).</p>
Proposed Weighting:	High
Proposed Revised Activity Description:	<p>Select and screen for the health-related social needs (HRSN) that are relevant for your patient population using tools that have been tested with underserved populations. If possible, use a screening tool that is health IT-enabled and includes standards-based, coded question/field for the capture of data. After screening, address HRSNs identified through at least one of the following:</p> <ul style="list-style-type: none"> <li>• Update a guide to available community resources and provide it to patients who are found to be at risk in one or more HRSN area;</li> </ul>



	<ul style="list-style-type: none"> <li>• Maintain formal (referral) links to key community resources and programs to strengthen the referral process, implementing closed-loop referrals where feasible; or</li> <li>• Record findings of screening and trigger follow-up within the electronic health record (EHR); then analyze EHR data on patients with one or more HRSN needed to identify and implement approaches to better serve their holistic needs through linkages with community resources.</li> </ul> <p>HRSNs prioritized by your practice might include health-harming legal needs, which require both health and legal support to resolve, areas such as food and housing insecurity, or needs such as exercise, nutrition, or chronic disease self-management.</p>
<b>Current Improvement Activity</b>	
<b>Current Activity ID:</b>	<b>IA CC 15</b>
<b>Current Subcategory:</b>	Care Coordination
<b>Current Activity Title:</b>	PSH Care Coordination
<b>Current Activity Description:</b>	<p>Participation in a Perioperative Surgical Home (PSH) that provides a patient-centered, physician-led, interdisciplinary, and team-based system of coordinated patient care, which coordinates care from pre-procedure assessment through the acute care episode, recovery, and post-acute care. This activity allows for reporting of strategies and processes related to care coordination of patients receiving surgical or procedural care within a PSH. The clinician must perform one or more of the following care coordination activities:</p> <ul style="list-style-type: none"> <li>• Coordinate with care managers/navigators in preoperative clinic to plan and implementation comprehensive post discharge plan of care;</li> <li>• Deploy perioperative clinic and care processes to reduce post-operative visits to emergency rooms;</li> <li>• Implement evidence-informed practices and standardize care across the entire spectrum of surgical patients; or</li> <li>• Implement processes to ensure effective communications and education of patients' post-discharge instructions.</li> </ul>
<b>Current Weighting:</b>	Medium
<b>Proposed Change and Rationale:</b>	This improvement activity was originally finalized in the CY 2018 Quality Payment Program final rule (82 FR 54175). We are proposing to increase the weight for this activity from medium to high, because it came to our attention that the level of effort to complete this activity was better aligned to our high-weight criteria, which specifies that high-weight activities reflect high intensity activities, requiring significant investment of time and resources. This activity requires team-based, interdisciplinary care coordinated across multiple care settings and requires efforts to both plan for and implement the selected care coordination actions. We note that the activity description would remain the same.
<b>Proposed Weighting:</b>	High
<b>Current Improvement Activity</b>	
<b>Current Activity ID:</b>	<b>IA EPA 1</b>
<b>Current Subcategory:</b>	Expanded Practice Access
<b>Current Activity Title:</b>	Provide 24/7 Access to MIPS Eligible Clinicians or Groups Who Have Real-Time Access to Patient's Medical Record
<b>Current Activity Description:</b>	<p>Provide 24/7 access to MIPS eligible clinicians, groups, or care teams for advice about urgent and emergent care (e.g., MIPS eligible clinician and care team access to medical record, cross-coverage with access to medical record, or protocol-driven nurse line with access to medical record) that could include one or more of the following:</p> <ul style="list-style-type: none"> <li>• Expanded hours in evenings and weekends with access to the patient medical record (e.g., coordinate with small practices to provide alternate hour office visits and urgent care);</li> <li>• Use of alternatives to increase access to care team by MIPS eligible clinicians and groups, such as e-visits, phone visits, group visits, home visits and alternate locations (e.g., senior centers and assisted living centers); and/or</li> <li>• Provision of same-day or next-day access to a consistent MIPS eligible clinician, group or care team when needed for urgent care or transition management.</li> </ul>



Current Weighting:	High
Proposed Change and Rationale:	<p>This improvement activity was originally finalized in the CY 2017 Quality Payment Program final rule (81 FR 77825). We propose to remove references to a "consistent" MIPS eligible clinician, group or care team, because the requirement for a consistent clinician is unclear and unnecessary to achieve the activity's objectives.</p> <p>We also propose to limit the scope of the activity to "urgent care" only rather than both "urgent and emergent care," because emergent care would only require the activity's interventions when also urgent. We believe that participation in the modified version of this improvement activity would be more likely to result in improved outcomes, because the improved clarity will promote expanded access to MIPS eligible clinicians in urgent care settings.</p> <p>We believe that these modifications help clarify the nature and intent of this activity, and thus will help clinicians selecting it to improve access to care for their patients.</p>
Proposed Revised Activity Description:	<p>Provide 24/7 access to MIPS eligible clinicians, groups, or care teams for advice about urgent care (e.g., MIPS eligible clinician and care team access to medical record, cross-coverage with access to medical record, or protocol-driven nurse line with access to medical record) that could include one or more of the following:</p> <ul style="list-style-type: none"> <li>Expanded hours in evenings and weekends with access to the patient medical record (e.g., coordinate with small practices to provide alternate hour office visits and urgent care);</li> <li>Use of alternatives to increase access to care team by MIPS eligible clinicians and groups, such as e-visits, phone visits, group visits, home visits and alternate locations (e.g., senior centers and assisted living centers); and/or</li> <li>Provision of same-day or next-day access to a MIPS eligible clinician, group or care team when needed for urgent care or transition management.</li> </ul>
<b>Current Improvement Activity</b>	
Current Activity ID:	IA EPA 2
Current Subcategory:	Expanded Practice Access
Current Activity Title:	Use of telehealth services that expand practice access
Current Activity Description:	Use of telehealth services and analysis of data for quality improvement, such as participation in remote specialty care consults or teleaudiology pilots that assess ability to still deliver quality care to patients.
Current Weighting:	Medium
Proposed Change and Rationale:	<p>This improvement activity was originally finalized in the CY 2017 QPP final rule (81 FR 77825). We propose to shift the focus of the activity to developing standardized approaches for telehealth in their daily practice and away from the analysis of data to evaluate effectiveness. This proposed shift retains the objective of the original activity, namely, of improving health outcomes for patients utilizing telehealth services. We believe this proposed shift makes the activity more relevant, because while telehealth has become a routine part of health care during the COVID-19 pandemic and is perceived as effective by clinicians and patients, clinicians may not have implemented it in a standardized manner or as widely as possible due to the rapid adaptation needed during the pandemic.<sup>15</sup> We believe that participation in the modified version of this improvement activity would be more likely to result in improved outcomes, because it promotes creation and implementation of standardized telehealth services, which can improve access and quality of care by offering another mode by which patients can interact with their care team.</p>
Proposed Revised Activity Description:	Create and implement a standardized process for providing telehealth services to expand access to care.
<b>Current Improvement Activity</b>	
Current Activity ID:	IA PM 6
Current Subcategory:	Population Management
Current Activity Title:	Use of toolsets or other resources to close health care disparities across communities
Current Activity Description:	Take steps to improve healthcare disparities, such as Population Health Toolkit or other resources identified by CMS, the Learning and Action Network, Quality Innovation Network, or National Coordinating Center. Refer to the local Quality Improvement Organization (QIO) for additional steps to take for improving health status of communities as there are many steps to select from for satisfying this activity. QIOs



	work under the direction of CMS to assist eligible clinicians and groups with quality improvement, and review quality concerns for the protection of beneficiaries and the Medicare Trust Fund.
Current Weighting:	Medium
Proposed Change and Rationale:	<p>This improvement activity was originally finalized in the CY 2017 Quality Payment Program final rule (81 FR 77825). We propose to add language that is more explicit about the improvement activity's focus on using population health data analysis to assess the prevalence of inequities in a practice and community.</p> <p>Specifically, we propose to modify the activity description to specify that population health data analysis tools should be used to identify health inequities; clinicians should then assess the options for effective interventions to address those inequities.<sup>16</sup> We also are proposing to add a requirement that clinicians create, refine, and implement an action plan to address inequities based on the data analysis conducted.</p> <p>We are also proposing to remove references to the Learning and Action Network, Quality Innovation Network, and National Coordinating Center as organizations that may identify tools or resources, because they may not be appropriate resources to support clinicians in assessing and addressing health disparities. Population health data analytic tools may be identified in a number of ways, and we seek to keep the activity broad in this manner.</p> <p>We also propose to replace the term "disparities" with "inequities" in both the title and description of the activity, which acknowledges structural problems like racism are inequities (i.e., state of being unfair) rather than using the term disparities, which is defined as being different or not at parity but does not clearly state the unjustness of the result. We are also proposing to modify the title to recognize that inequities in both health (i.e., status and outcomes) and health care (i.e., access, quality, and safety) may be addressed.</p> <p>With the proposed modifications, clinicians attesting to this improvement activity would need to first analyze inequities in their patient populations, and then use that data to identify and then address issues or gaps. We believe that participation in the modified version of this improvement activity would be more likely to result in improved outcomes, because it is more focused on a data-driven approach to population health analysis and requires practices to use this data to inform a formal action planning process to address them.</p>
Proposed Revised Activity Title:	Use of Toolsets or Other Resources to Close Health and Health Care Inequities Across Communities
Proposed Revised Activity Description:	Address inequities in health outcomes by using population health data analysis tools to identify health inequities in the community and practice, and assess options for effective and relevant interventions such as Population Health Toolkit or other resources identified by the clinician, practice, or by CMS. Based on this information, create, refine, and implement an action plan to address and close inequities in health outcomes and/or health care access, quality, and safety.
<b>Current Improvement Activity</b>	
Current Activity ID:	IA_PM_11
Current Subcategory:	Population Management
Current Activity Title:	Regular review practices in place on targeted patient population needs
Current Activity Description:	Implementation of regular reviews of targeted patient population needs, such as structured clinical case reviews, which includes access to reports that show unique characteristics of eligible clinician's patient population, identification of vulnerable patients, and how clinical treatment needs are being tailored, if necessary, to address unique needs and what resources in the community have been identified as additional resources.
Current Weighting:	Medium
Proposed Change and Rationale:	This improvement activity was originally finalized in the CY 2017 Quality Payment Program final rule (81 FR 77825). We propose to make explicit the acknowledgement that structural issues, like racism, are a root cause of many disparities in health outcomes across populations.



	<p>Specifically, we propose to modify the improvement activity to encourage clinicians to explore structural issues like racism explicitly and openly during their reviews of targeted patient population needs. We propose to remove reference to “vulnerable patients” and replace it with “underserved patients” to better clarify that there is nothing inherently vulnerable about a person. Instead, their poorer health outcomes are due to systemic failures within and beyond the health system—failures which leave the health needs of underserved communities unmet. We believe these additions would allow clinicians to gain perspective and ideas beneficial to their patients by specifically identifying underserved patients, related structural inequities such as those due to racism, and tailor treatment needs and identify community resources to address those problems.</p> <p>We are also proposing to modify the description language in ways that clarify the activity, but do not change the intent.</p> <p>We believe that participation in the modified version of this improvement activity would be more likely to result in improved outcomes, because it requires clinicians to implement regular reviews of patient population needs to identify and address the needs of underserved populations and connect those patients to resources in the community.</p>
Proposed Revised Activity Description:	<p>Implement regular reviews of targeted patient population needs, such as structured clinical case reviews, which include access to reports that show unique characteristics of eligible clinician's patient population, identification of underserved patients, and how clinical treatment needs are being tailored, if necessary, to address unique needs and what resources in the community have been identified as additional resources. The review should consider how structural inequities, such as racism, are influencing patterns of care and consider changes to acknowledge and address them. Reviews should stratify patient data by demographic characteristics and health related social needs to appropriately identify differences among unique populations and assess the drivers of gaps and disparities and identify interventions appropriate for the needs of the sub-populations.</p>
<b>Current Improvement Activity</b>	
<b>Current Activity ID:</b>	<b>IA_PSPA_6</b>
<b>Current Subcategory:</b>	Patient Safety and Practice Assessment
<b>Current Activity Title:</b>	Consultation of the Prescription Drug Monitoring program
<b>Current Activity Description:</b>	<p>Clinicians would attest to reviewing the patients' history of controlled substance prescription using state prescription drug monitoring program (PDMP) data prior to the issuance of a Controlled Substance Schedule II (CSII) opioid prescription lasting longer than 3 days. For the transition year, clinicians would attest to 60 percent review of applicable patient's history. For the Quality Payment Program Year 2 and future years, clinicians would attest to 75 percent review of applicable patient's history performance.</p>
<b>Current Weighting:</b>	High
<b>Proposed Change and Rationale:</b>	<p>This improvement activity was originally finalized in the CY 2017 Quality Payment Program final rule (81 FR 77825). We propose to increase the percentage of applicable patients for whom clinicians must review prescription history within the PDMP from 75 percent to 100 percent and remove language referencing prior year requirements, which are now obsolete. States are increasingly mandating that providers review the PDMP for all applicable patients.<sup>17</sup></p> <p>We also propose to include an exception for patients receiving palliative and hospice care, as they are exempt from CDC prescribing guidelines.<sup>18</sup> The CDC has identified increasing use of PDMP as the most promising state-level strategy for improving clinical care and outcomes for at-risk patients.<sup>19</sup> We support the continued efforts of clinicians to increase usage of PDMP in their practice.</p> <p>We also propose to modify the description language in ways that clarify the activity but do not affect its intent.</p> <p>We believe that participation in the modified version of this improvement activity would be more likely to result in improved outcomes, because it supports use of prescription drug monitoring programs to reduce overprescribing of controlled</p>



	substance prescriptions lasting longer than three days, <sup>20</sup> which can lead to substance use disorder.
Proposed Revised Activity Description:	Review the history of controlled substance prescriptions for 100 percent* of patients using state prescription drug monitoring program (PDMP) data prior to the issuance of a Controlled Substance Schedule II (CSII) opioid prescription lasting longer than 3 days. *Apply exceptions for patients receiving palliative and hospice care.
<b>Current Improvement Activity</b>	
<b>Current Activity ID:</b>	<b>IA_PSPA_18</b>
<b>Current Subcategory:</b>	Patient Safety and Practice Assessment
<b>Current Activity Title:</b>	Measurement and improvement at the practice and panel level
<b>Current Activity Description:</b>	<p>Measure and improve quality at the practice and panel level, such as the American Board of Orthopaedic Surgery (ABOS) Physician Scorecards, that could include one or more of the following:</p> <ul style="list-style-type: none"> <li>• Regularly review measures of quality, utilization, patient satisfaction and other measures that may be useful at the practice level and at the level of the care team or MIPS eligible clinician or group (panel); and/or</li> <li>• Use relevant data sources to create benchmarks and goals for performance at the practice level and panel level.</li> </ul>
<b>Current Weighting:</b>	Medium
<b>Proposed Change and Rationale:</b>	<p>This improvement activity was originally finalized in the CY 2017 Quality Payment Program final rule (81 FR 77825). We propose to modify this activity to include the opportunities for clinicians to fulfill this improvement activity by applying the quality, utilization, patient satisfaction, and other measures or quality improvement actions to address inequities in quality and outcomes for underserved populations, including racial, ethnic, and gender minorities.</p> <p>We also propose to improve the activity language in ways that clarify the activity, but do not affect its intent, including simplifying the first activity option by removing the language “that may be useful at the practice level and at the level of the care team or MIPS eligible clinician or group (panel),” since it is stated at the beginning of the description that these activities can take place at the practice and panel levels.</p> <p>We believe that participation in the modified version of this improvement activity would be more likely to result in improved outcomes, because clinicians who review these relevant data sources for particular underserved populations and create benchmarks and goals for improvement are likely to provide better quality and more equitable care.</p>
<b>Proposed Revised Activity Description:</b>	<p>Measure and improve quality at the practice and panel level, such as the American Board of Orthopaedic Surgery (ABOS) Physician Scorecards that could include one or more of the following:</p> <ul style="list-style-type: none"> <li>• Regularly review measures of quality, utilization, patient satisfaction and other measures; and/or</li> <li>• Use relevant data sources to create benchmarks and goals for performance at the practice or panel levels.</li> </ul> <p>Clinicians can apply the measurement and quality improvement to address inequities in quality and outcomes for underserved populations, including racial, ethnic, and/or gender minorities.</p>
<b>Current Improvement Activity</b>	
<b>Current Activity ID:</b>	<b>IA_ERP_3</b>
<b>Current Subcategory:</b>	Emergency Response and Preparedness
<b>Current Activity Title:</b>	COVID-19 Clinical Data Reporting with or without Clinical Trial
<b>Current Activity Description:</b>	<p>To receive credit for this improvement activity, a MIPS eligible clinician or group must: (1) participate in a COVID-19 clinical trial utilizing a drug or biological product to treat a patient with a COVID-19 infection and report their findings through a clinical data repository or clinical data registry for the duration of their study; or (2) participate in the care of patients diagnosed with COVID-19 and simultaneously submit relevant clinical data to a clinical data registry for ongoing or future COVID-19 research. Data should be submitted to the extent permitted by applicable privacy and security laws. Examples of COVID-19 clinical trials may be found on the U.S. National Library of</p>



	<p>Medicine website at <a href="https://clinicaltrials.gov/ct2/results?cond=COVID-19">https://clinicaltrials.gov/ct2/results?cond=COVID-19</a>. In addition, examples of COVID-19 clinical data registries may be found on the National Institute of Health website at <a href="https://search.nih.gov/search?utf8=%E2%9C%93&amp;affiliate=nih&amp;query=COVID+registries&amp;commit=Search">https://search.nih.gov/search?utf8=%E2%9C%93&amp;affiliate=nih&amp;query=COVID+registries&amp;commit=Search</a>.</p> <p>For purposes of this improvement activity, clinical data registries must meet the following requirements: (1) the receiving entity must declare that they are ready to accept data as a clinical registry; and (2) be using the data to improve population health outcomes. Most public health agencies and clinical data registries declare readiness to accept data from clinicians via a public online posting. Clinical data registries should make publicly available specific information on what data the registry gathers, technical requirements or specifications for how the registry can receive the data, and how the registry may use, re-use, or disclose individually identifiable data it receives. For purposes of credit toward this improvement activity, any data should be sent to the clinical data registry in a structured format, which the registry is capable of receiving. A MIPS eligible clinician may submit the data using any standard or format that is supported by the clinician's health IT systems, including but not limited to, certified functions within those systems. Such methods may include, but are not limited to, a secure upload function on a web portal, or submission via an intermediary, such as a health information exchange. To ensure interoperability and versatility of the data submitted, any electronic data should be submitted to the clinical data registry using appropriate vocabulary standards for the specific data elements, such as those identified in the United States Core Data for Interoperability (USCDI) standard adopted in 45 CFR 170.213.</p>
Weighting:	High
Proposed Action and Rationale:	<p>We previously adopted this improvement activity to the inventory for the 2020 and 2021 MIPS performance periods only in response to the PHE for COVID-19 and planned to reassess its need for the 2022 MIPS performance period/2024 MIPS payment year and future years. We are now proposing to continue this improvement activity for the 2022 MIPS performance period/2024 MIPS payment year and future years.</p> <p>Despite increasing dissemination of COVID-19 vaccines, we anticipate that COVID-19 infections may continue to be prevalent in communities with low vaccine adoption and/or among groups (i.e., children) who do not yet have access to vaccines. Additionally, new variants of COVID may introduce additional challenges to the eradication and treatment of the illness. Due to these concerns, clinicians may likely continue to encounter COVID-19 patients, and therefore we anticipate the need for COVID-19 clinical trials and data collection/sharing through registries to continue through CY 2022 and future years. Each year we will reassess whether there remains a need for additional data sharing or if preventive measures and clinical treatments have advanced to the point where these type of data are not needed. We want eligible clinicians to be able to attest to this improvement activity if it is still pertinent. If this improvement activity becomes no longer needed, we will remove the activity through rulemaking. While COVID-19 continues to be a PHE and a great concern for clinicians, patients, and communities, we believe that continued participation in this improvement activity is likely to result in improved outcomes by improving the collection of data clinicians use for the care of their patients as they monitor and manage COVID-19.</p> <p>We note that the activity description would remain the same.</p>

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February 2021

# Racial and Ethnic Health Inequities and Medicare

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## Executive Summary

This chart collection draws on primary and secondary data analyses by KFF and other sources to examine the characteristics, experiences, and outcomes of the Medicare population by race and ethnicity (see Methods for details on data and analysis). It includes data from a variety of sources to describe demographics, health status and disease prevalence, health coverage, access to care and service utilization, and health outcomes, including the most current data available pertaining to disparities related to COVID-19 within the Medicare population. It also documents disparities in income and wealth among people on Medicare.

## Key Takeaways

- Life expectancy at age 65 has improved since the enactment of Medicare among all older adults but is lower for Black adults than White or Hispanic adults (18.0, 19.4, and 21.4 years, respectively) and higher for Hispanic adults than Black or White adults.
- Overall, Black and Hispanic Medicare beneficiaries have fewer years of formal education and lower median per capita income, savings, and home equity than White beneficiaries.
- Among Medicare beneficiaries, people of color are more likely to report being in relatively poor health, have higher prevalence rates of some chronic conditions, such as hypertension and diabetes than White beneficiaries; they are also less likely to have one or more doctor visit, but have higher rates of hospital admissions and emergency department visits than White beneficiaries.
- While the vast majority of Medicare beneficiaries across all racial and ethnic groups have some source of supplemental coverage to help fill in Medicare's benefit gaps and cost-sharing requirements, the share of beneficiaries with different types of coverage varies by race and ethnicity. A smaller share of Black and Hispanic Medicare beneficiaries than White beneficiaries have private supplemental coverage through Medigap or retiree health plans, while a larger share have wrap-around coverage under Medicaid; a larger share of Black and Hispanic than White beneficiaries are enrolled in Medicare Advantage plans
- While relatively few Medicare beneficiaries overall report problems with access to care, a larger share of Black and Hispanic beneficiaries report trouble getting needed care than White beneficiaries.
- The COVID-19 pandemic has further highlighted stark racial/ethnic health inequities among Medicare beneficiaries, with Black, Hispanic, and American Indian/Alaska Natives accounting for disproportionate rates of COVID-19 cases and hospitalizations. Among adults ages 65 and older, people of color bear disproportionate rates of COVID-19 deaths relative to older White adults.

## Overview

Medicare is a national health insurance program that provides coverage to more than 60 million people ages 65 years and older and younger adults with long-term disabilities, including 15 million beneficiaries who are people of color. Medicare [covers a broad range of health services](#), including hospital and physician services, preventive services, skilled nursing facility and home health care, hospice, and prescription drugs. While Medicare has been instrumental in providing adults access to medical care, racial disparities in diagnoses, treatment, and outcomes among beneficiaries persist and have been exacerbated by the coronavirus pandemic.

Medicare has helped to mitigate racial and ethnic inequities in health care in its role as both a regulator and the [largest single purchaser](#) of personal health care in the U.S. Prior to the establishment of Medicare, [half of older adults](#) lacked health insurance. Soon after its enactment in 1965, Medicare facilitated the integration of hospitals by enforcing Title VI of the Civil Rights Act, which prohibits the distribution of federal funds to institutions that practice discrimination.<sup>1</sup> Before then, many hospitals were segregated, and in many parts of the country, Black physicians were unable to practice in hospitals in their community.<sup>2</sup> As Dorothy Height, an American civil and women's rights activist, [observed](#), “the combination of Medicare, Medicaid and the civil rights legislation changed the health care landscape forever for Black Americans and minorities of all ages. Everyone benefited from these policies.”

However, as the coronavirus pandemic has laid bare, racial and ethnic inequities in health and health care persist, including among people with Medicare. Among adults ages 65 and over, COVID-19 related mortality rates for Black and Hispanic adults are nearly double the rate for White adults. In the Medicare population, which includes both older adults and younger adults with long-term disabilities, Black, Hispanic, and American Indian and Alaska Native beneficiaries have borne a disproportionate burden of COVID-19 [cases and hospitalizations](#).

Long before the COVID-19 pandemic, numerous studies documented health inequities among Medicare beneficiaries by race and ethnicity, even after controlling for multiple factors, such as age, sex, and comorbidities. For example, Black Medicare beneficiaries have higher hospital readmission rates than White beneficiaries even after controlling for multiple patient-level factors,<sup>3, 4, 5</sup> and in some studies, these disparities persist even within the same hospital or skilled nursing facility,<sup>6,7</sup> suggesting that systemic-level factors are driving forces behind these disparities. Moreover, studies have documented racial/ethnic disparities in cancer survival rates and receipt of optimal treatments.<sup>8, 9, 10, 11,12</sup>

Health inequities among Medicare beneficiaries are [attributed to broader structural](#), socioeconomic, political, and environmental factors that are rooted in years of systemic racism. Socioeconomic disadvantages associated with structural racism shape health outcomes among people of color long before the age of Medicare eligibility is reached and have a cumulative effect over the course of a lifetime, contributing to ongoing or greater inequities in older ages.<sup>13,14</sup>

This chart collection draws on primary and secondary data analyses by KFF and other sources to examine the characteristics, experiences, and outcomes of the Medicare population by race and ethnicity (see Methods for details on data and analysis). It includes data from a variety of sources to describe demographics, health status and disease prevalence, health coverage, access to care and service utilization, and health outcomes, including the most current data available pertaining to disparities related to COVID-19 within the Medicare population. It also documents disparities in income and wealth among people on Medicare.

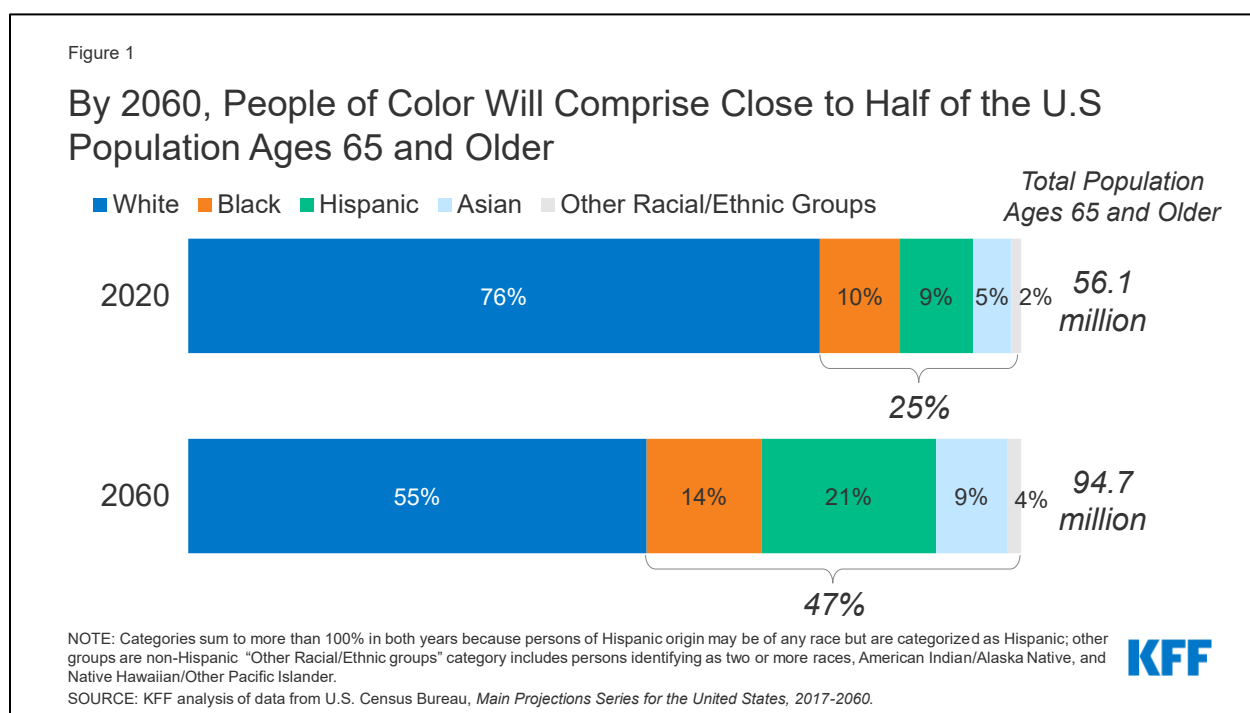
While the collection of race and ethnicity data in administrative and survey data has improved over time, sample size and data collection limitations, including limitations related to [completion, accuracy, and classifications of race/ethnicity data](#), preclude analysis of certain racial and ethnic groups consistently across data sources. Further, gaps in data reporting and collection standards, such as the [reporting of COVID-19 cases and deaths in nursing homes](#) by race and ethnicity, impede the complete identification of racial and ethnic disparities. These data limitations affect our ability to display results for a consistent set of racial and ethnic groups in this chart collection, especially for Asian, American Indian and Alaska Native, and Native Hawaiian and Other Pacific Islander beneficiaries, and beneficiaries who identify as two more races in some of our analyses. Moreover, due to these data limitations, we are unable to present more nuanced and disaggregated data that reflect the heterogeneity within different racial and ethnic groups. For example, researchers have documented differences in health outcomes within Hispanic subgroups, such as those identifying as Mexican, Cuban, Puerto Rican, Dominican, and Central/South American, that would otherwise be masked.<sup>15,16</sup> Throughout this brief, individuals of Hispanic origin may be of any race, but are classified as Hispanic for the analysis; all other groups are non-Hispanic.

## Demographics

### By 2060, People of Color Will Comprise Close to Half of the U.S Population Ages 65 and Older

The population of the United States ages 65 and older is [projected to grow](#) from 56 million in 2020 to 95 million in 2060, accounting for nearly a quarter of the nation's total population in 2060.

The U.S population ages 65 and over is also expected to become more diverse over time. Between 2020 and 2060, White adults are projected to account for a decreasing share of adults ages 65 and older, with their population declining from 76% to 55%, while the share of adults ages 65 and older who are people of color is projected to nearly double, from 25% to 47%. Much of this increase reflects growth in the older Hispanic adult population, with the share of adults ages 65 and older who are Hispanic projected to more than double over the next four decades, from 9% in 2020 to 21% in 2060 (Figure 1).



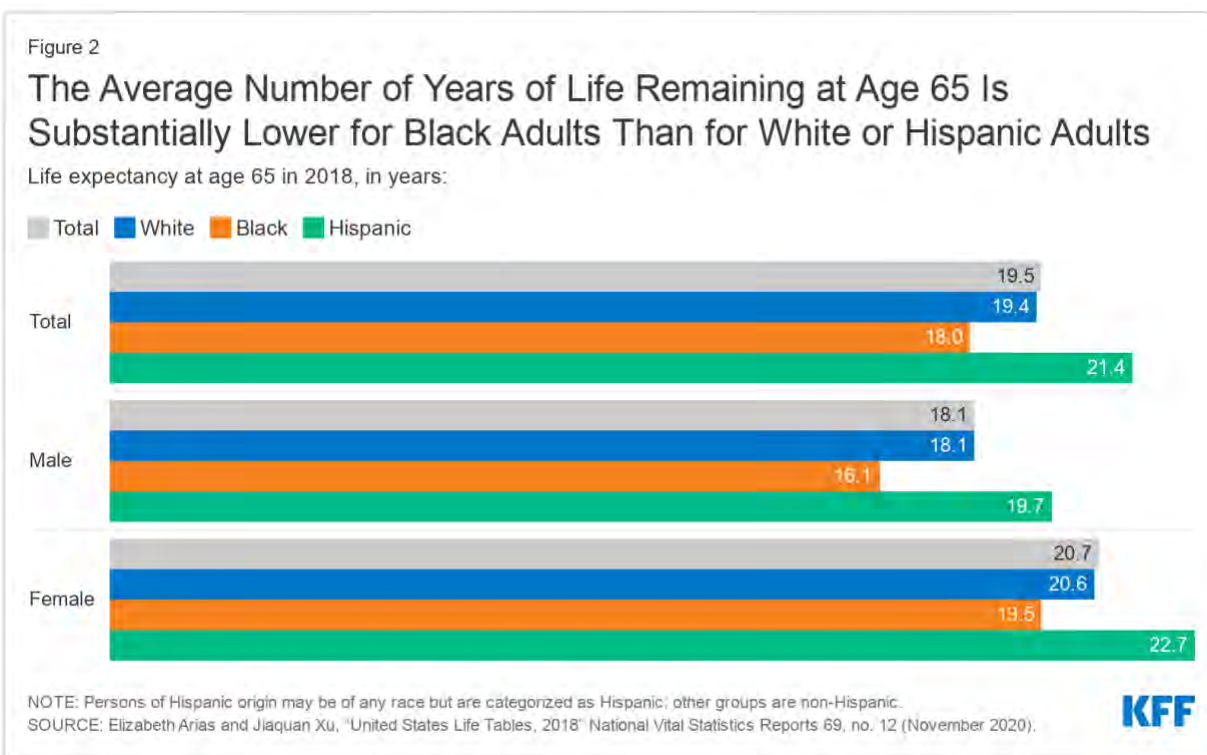


### The Average Number of Years of Life Remaining at Age 65 Is Substantially Lower for Black Adults Than for White or Hispanic Adults

In 2018, adults in the U.S who reached age 65 were expected to live an *additional* 19.5 years on average –reflecting a 5-year gain in life expectancy since 1960, prior to the enactment of Medicare.<sup>17</sup>

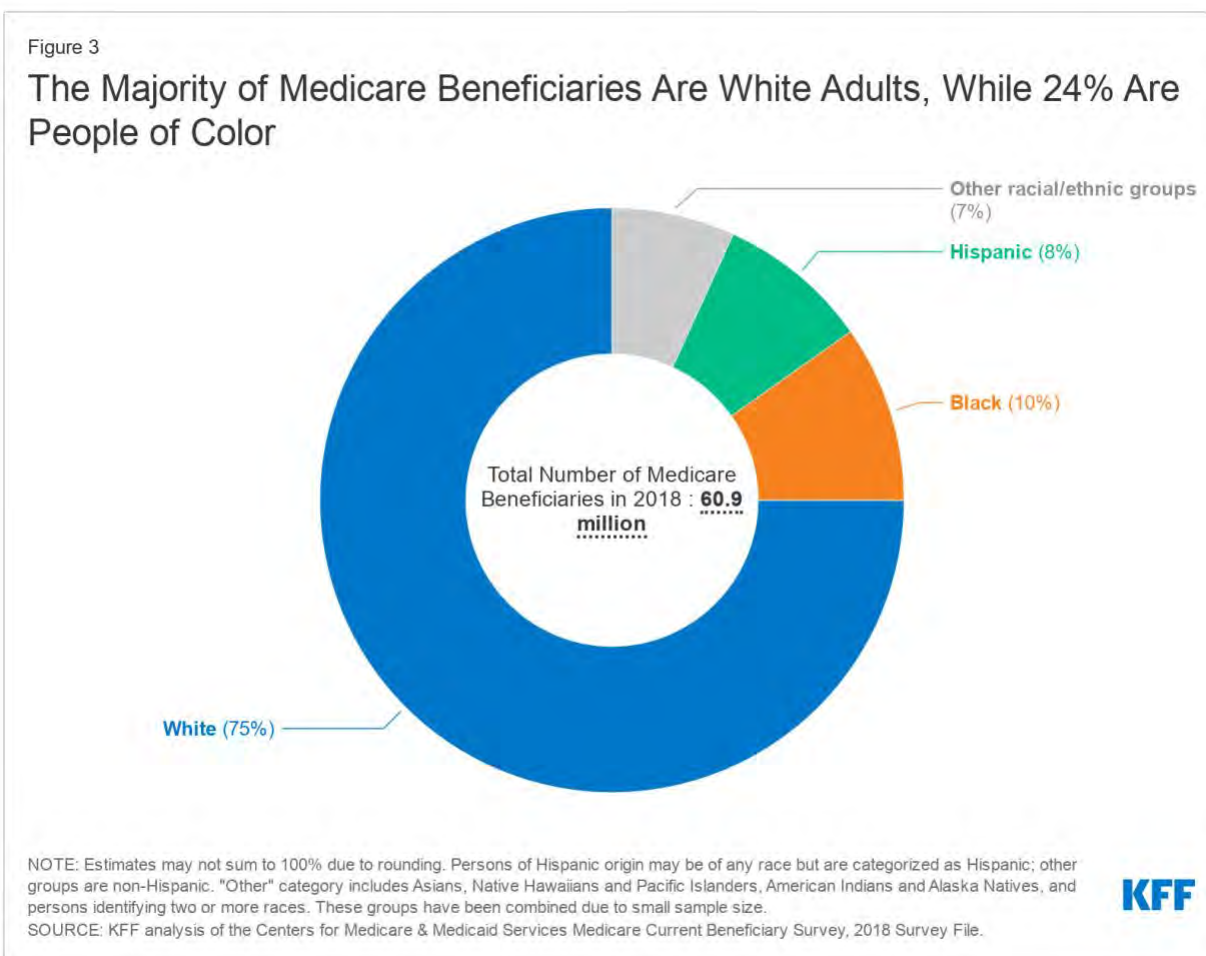
However, life expectancy at age 65 is lower among Black adults (18 years) than among White adults (19.4 years) and Hispanic adults (21.4 years) (Figure 2). Among adults in all three groups, life expectancy at age 65 is higher for women than men.

Notably, Hispanic male and female adults have the highest life expectancy at age 65, despite being socioeconomically disadvantaged compared to White adults. Research has, in part, attributed this advantage (i.e., “Hispanic paradox”<sup>18</sup>) to lower smoking rates and other positive health behaviors among Hispanic adults relative to other groups, as well as immigration-related processes that indirectly select healthier immigrants.<sup>19</sup> However, these findings are still not fully understood. Researchers have also projected that among Hispanic adults born in the United States, this life expectancy advantage is expected to diminish due to increasing prevalence of obesity.<sup>20</sup>



### The Majority of Medicare Beneficiaries Are White Adults, While 24% Are People of Color

In 2018, there were 60.9 million Medicare beneficiaries in total, including adults ages 65 and older and younger adults living with a long-term disability. A majority of Medicare beneficiaries are White, while 24% are people of color. This includes 10% (6 million) Black beneficiaries, 8% (5.1 million) Hispanic beneficiaries, and 6% (3.7 million) beneficiaries in other racial and ethnic groups, including Asian, Native Hawaiian or Other Pacific Islander, and American Indian or Alaska Native people as well as people identifying two or more races (Figure 3).



### Compared to the Racial/Ethnic Distribution of Medicare Beneficiaries at the National Level, Black and Hispanic Beneficiaries Account for a Disproportionate Share of the Medicare Population in Some States

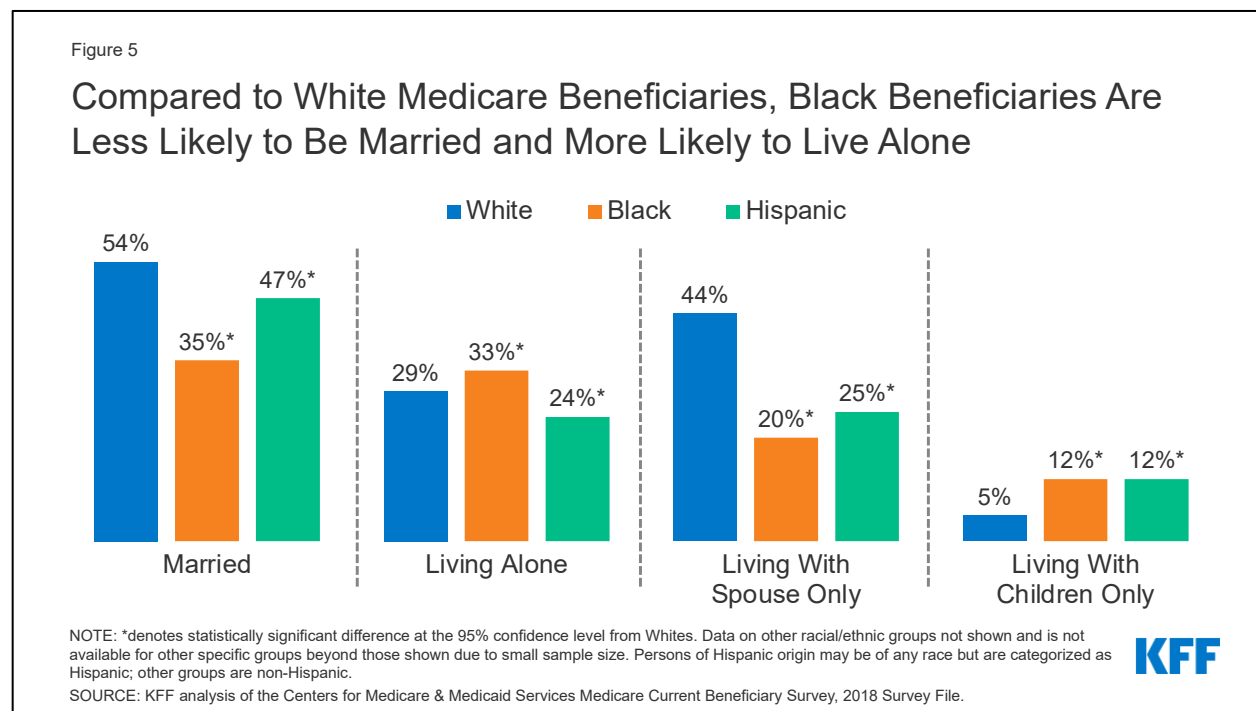
While the Medicare population in all states is predominantly White, Black and Hispanic beneficiaries account for a disproportionate share of the Medicare population in some states, relative to the racial/ethnic distribution of Medicare beneficiaries at the national level (Table 1, Figure 4). Black adults account for 11% of the Medicare population nationally, but a larger share in 14 states and the District of Columbia, and less than 5% in 22 states. Notably, the share of Black adults in the Medicare population in the District of Columbia (63%) is nearly six times higher than the national average (Table 1). Hispanic

adults account for 8% of the Medicare population nationally, but a larger share in nine states, and less than 5% in 35 states and the District of Columbia. In large part, these distributions of Medicare beneficiaries by race and ethnicity reflect the variation in the racial and ethnic composition of the U.S population across states. (See [online version of this report](#) for Figure 4.)

### Compared to White Medicare Beneficiaries, Black Beneficiaries Are Less Likely to Be Married and More Likely to Live Alone

Household living arrangements of Medicare beneficiaries differ by race and ethnicity. Researchers have considered living alone as a potential predisposing factor for social isolation, which is a risk factor for poor health outcomes.<sup>21</sup>

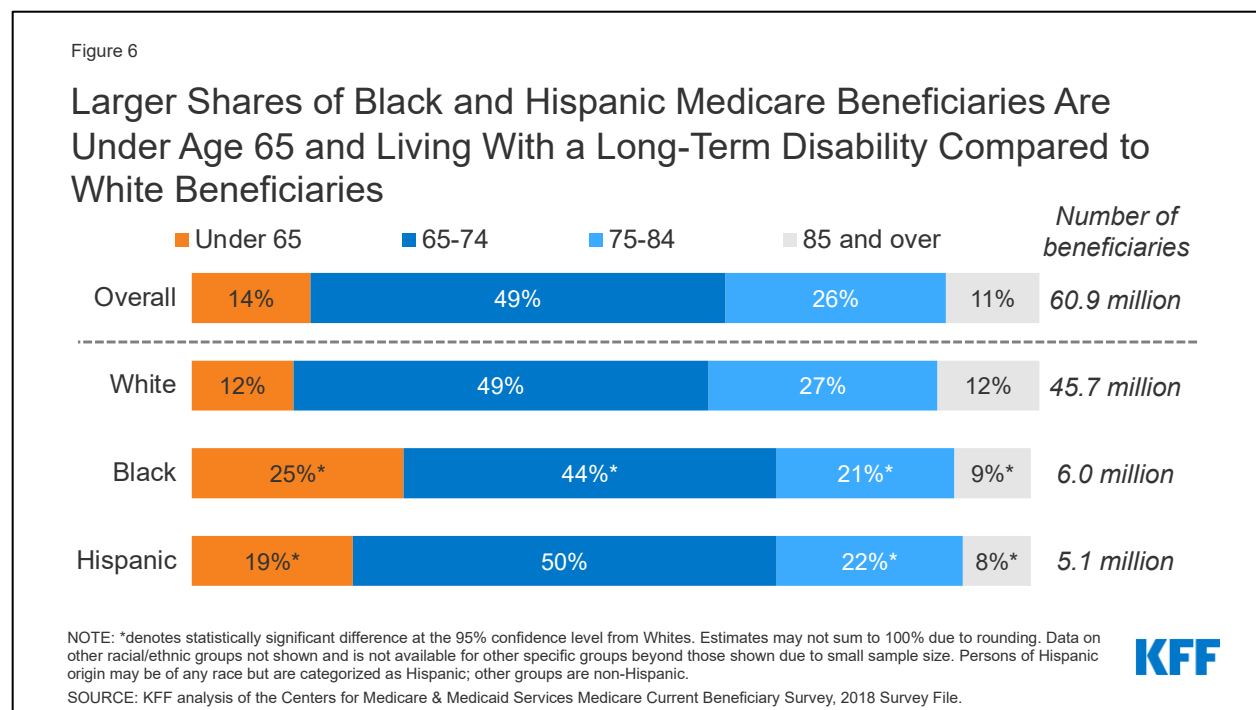
Compared to White beneficiaries, Black beneficiaries are more likely to live alone (54% versus 33%, respectively) (Figure 5). Conversely, smaller shares of Black and Hispanic beneficiaries are married than White beneficiaries (35%, 47%, and 54%, respectively), with Black and Hispanic beneficiaries being less likely to be living with just their spouse compared to White beneficiaries.



### Larger Shares of Black and Hispanic Medicare Beneficiaries Are Under Age 65 and Living with a Long-Term Disability Compared to White Beneficiaries

The vast majority (86%) of Medicare beneficiaries are ages 65 and older, while 14% are under age 65 and qualify for Medicare due to a long-term disability.

Larger shares of Black (25%) and Hispanic (19%) beneficiaries are under age 65 compared to White beneficiaries (12%) (Figure 6). Beneficiaries under age 65 are more likely than older adults to have lower incomes, report fair or poor health status, and have a cognitive or mental impairment, regardless of race/ethnicity.



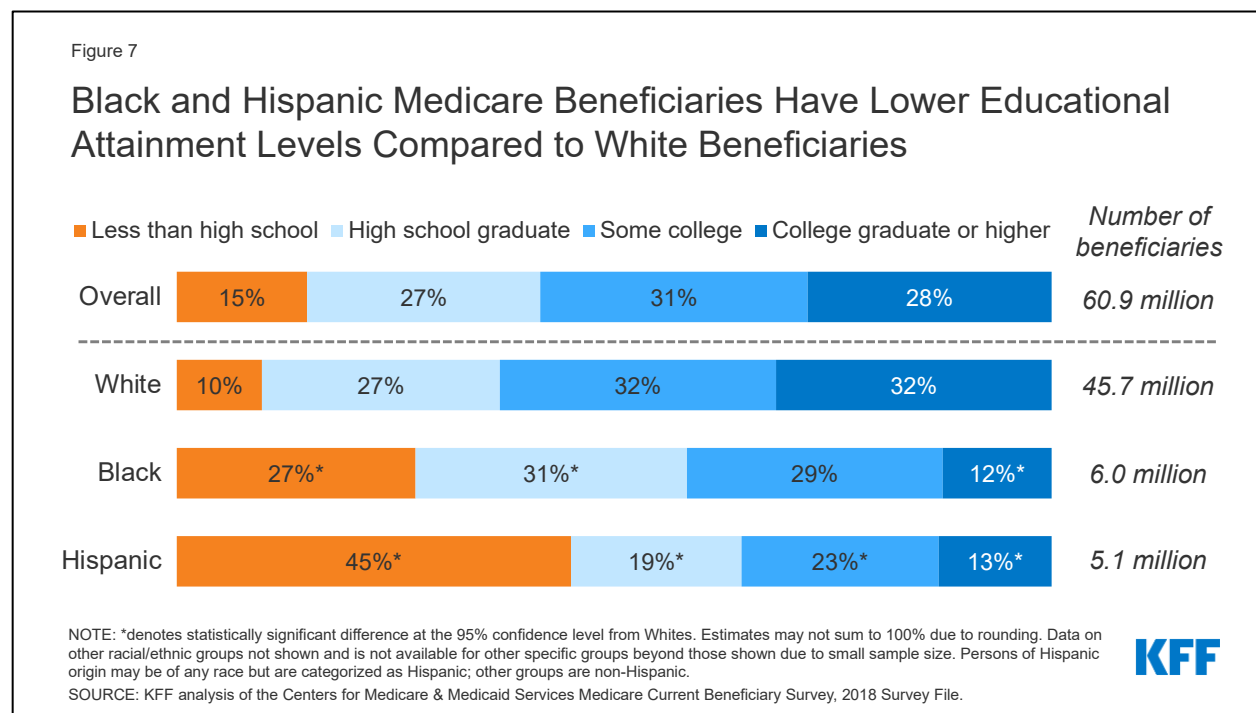


## Education, Poverty, and Wealth

### Black and Hispanic Medicare Beneficiaries Have Lower Educational Attainment Levels Compared to White Beneficiaries

Educational attainment, one of the [key social determinants of health](#), varies by race and ethnicity, with Black and Hispanic beneficiaries having fewer years of education compared to White beneficiaries.

More than one quarter of Black (27%) Medicare beneficiaries and nearly one half (45%) of Hispanic beneficiaries have less than a high school education, compared to 10% of White beneficiaries (Figure 7). Conversely, a much smaller share of Black (12%) and Hispanic (13%) beneficiaries than White beneficiaries (32%) have a college degree or higher.

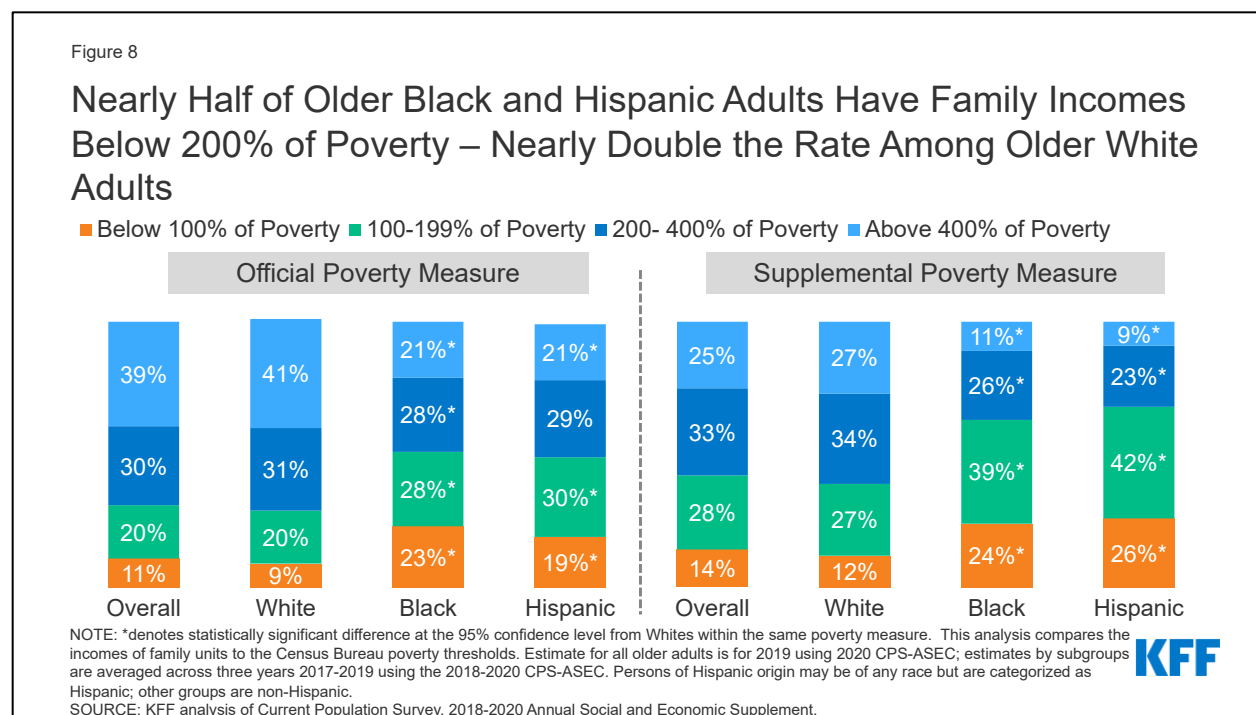


### Nearly Half of Older Hispanic and Black Adults Have Family Incomes Below 200% of the Poverty Threshold—Nearly Double the Rate Among Older White Adults

Among people ages 65 and older, Black and Hispanic adults are more likely than older White adults to have family income below poverty, based on both the official poverty measure and the Supplemental Poverty Measure (SPM).

Based on the official poverty measure, nearly half of older Black and Hispanic adults (51% and 49%, respectively) have family incomes below 200% of poverty, compared to just over one quarter (29%) of older White adults (Figure 8).

The share of Black and Hispanic adults with family income below poverty is higher based on the SPM than under the official poverty measure. The SPM differs from the official poverty measure in that it takes into account several [additional financial resources](#), including in-kind government benefits (e.g., food stamps, housing subsidies), tax credits, out-of-pocket medical expenses, work expenses, homeownership, and geographic variation in housing costs. The SPM also deducts medical out-of-pocket expenses from financial resources, which is an especially important factor in calculating income for older adults. Based on the SPM, 63% of older Black adults and 68% of older Hispanic adults have incomes below 200% of poverty, compared to 39% of older White adults.

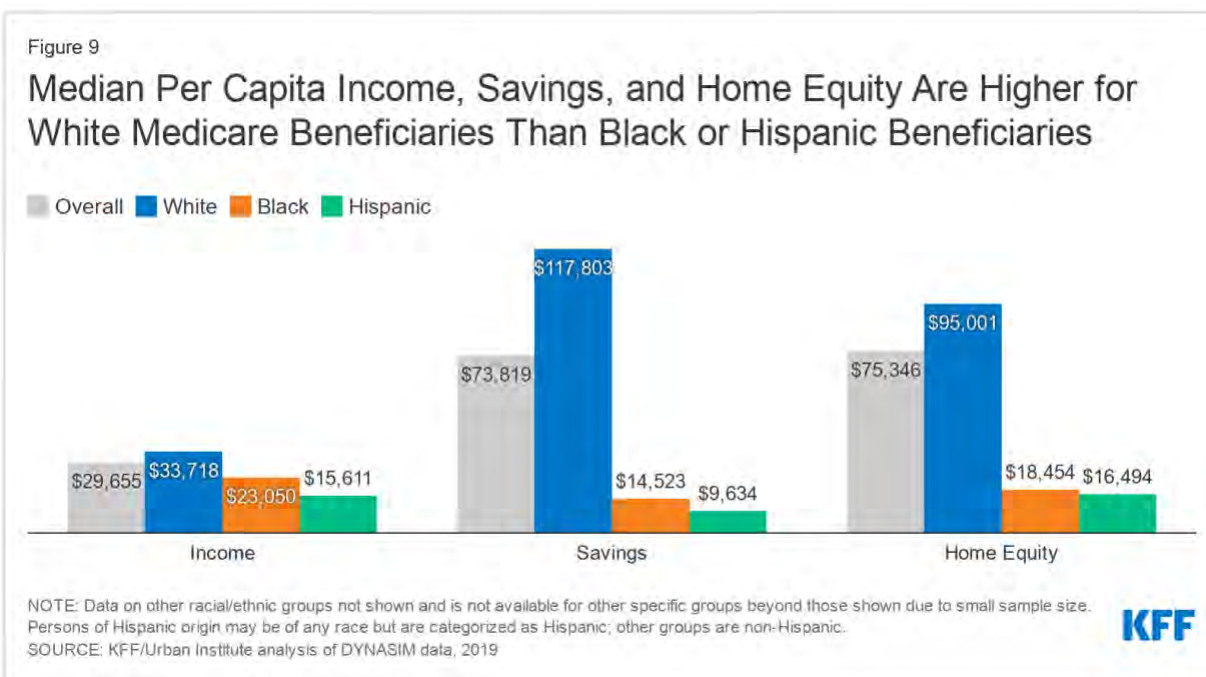


### Median Per Capita Income, Savings, and Home Equity are Higher for White Beneficiaries Than for Black or Hispanic Beneficiaries

In 2019, half of all Medicare beneficiaries had incomes below \$29,655 per person, savings below \$73,819 per person, and home equity below \$75,346 per person (Figure 9).

Median per capita income among White beneficiaries (\$33,718) was double that of Hispanic beneficiaries (\$15,611) and 1.5 times higher than median per capita income among Black beneficiaries (\$23,050).

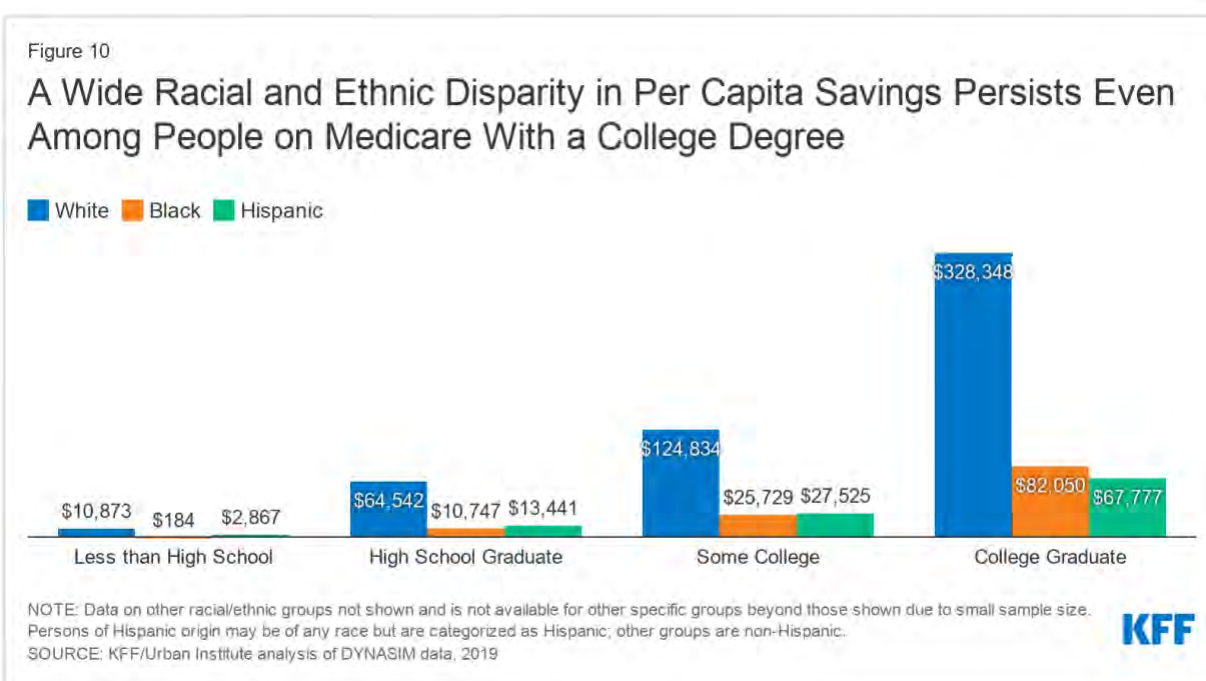
The wealth gap, based on median per capita home equity and savings, was notably wider. Median per capita savings among White beneficiaries (\$117,803) was more than eight times higher than savings among Black beneficiaries (\$14,523) and about twelve times higher than savings among Hispanic beneficiaries (\$9,634). Median per capita home equity was more than five times higher among White beneficiaries (\$95,001) than among Black beneficiaries (\$18,454) or Hispanic beneficiaries (\$16,494). Lower savings and home equity among people of color on Medicare than among White Medicare beneficiaries, in part, reflects fewer opportunities among Black and Hispanic adults to accumulate wealth and transfer wealth from one generation to the next.<sup>22,23,24</sup>



### A Wide Racial and Ethnic Disparity in Per Capita Savings Persists Even Among People on Medicare With a College Degree

While educational attainment has been considered by [some](#) as a pathway to improving wealth attainment, large racial and ethnic wealth gaps among Medicare beneficiaries persist even among beneficiaries who have attained the highest level of formal education.

Among beneficiaries with a college degree or higher, median per capita savings among White beneficiaries (\$328,348) were four times higher than among Black beneficiaries (\$82,050) and almost five times higher than among Hispanic beneficiaries (\$67,777) (Figure 10). The persistence of the racial wealth gap even at the highest education level reinforces the role of other factors, including structural racism, in generating inequities in Medicare beneficiaries' financial security.

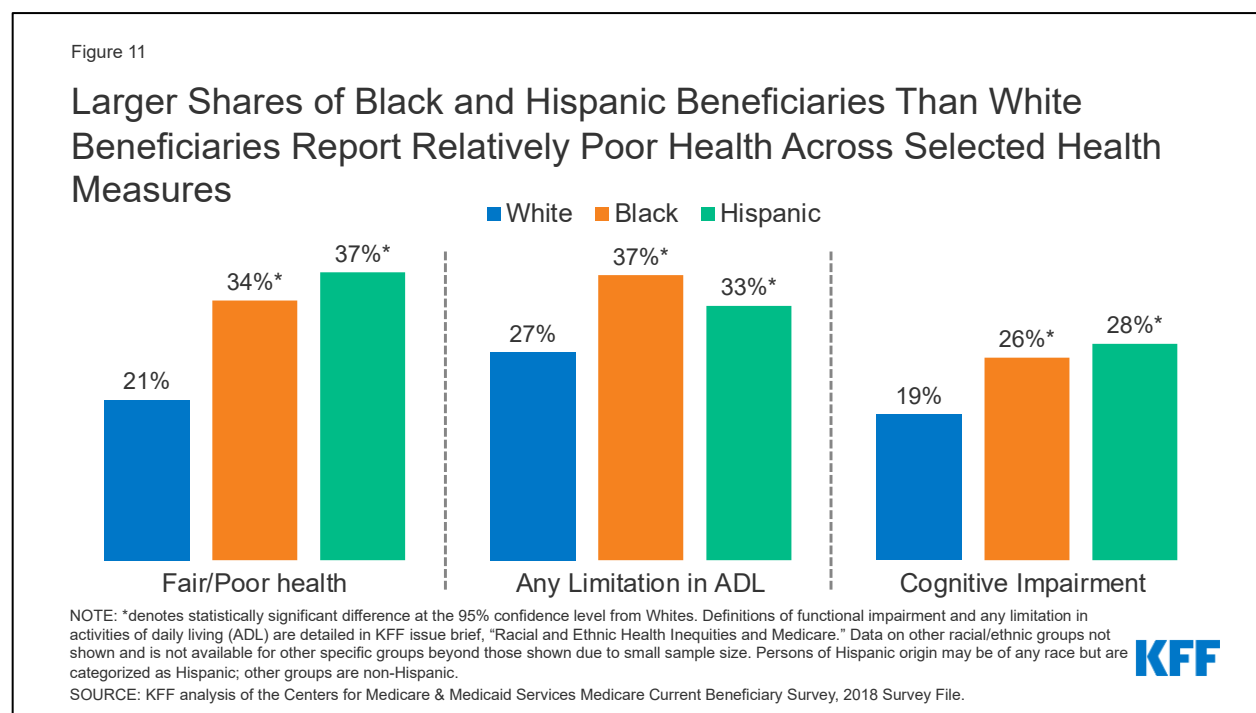




## Health Status and Disease Prevalence

### Larger Shares of Black and Hispanic Beneficiaries Than White Beneficiaries Report Relatively Poor Health Across Selected Health Measures

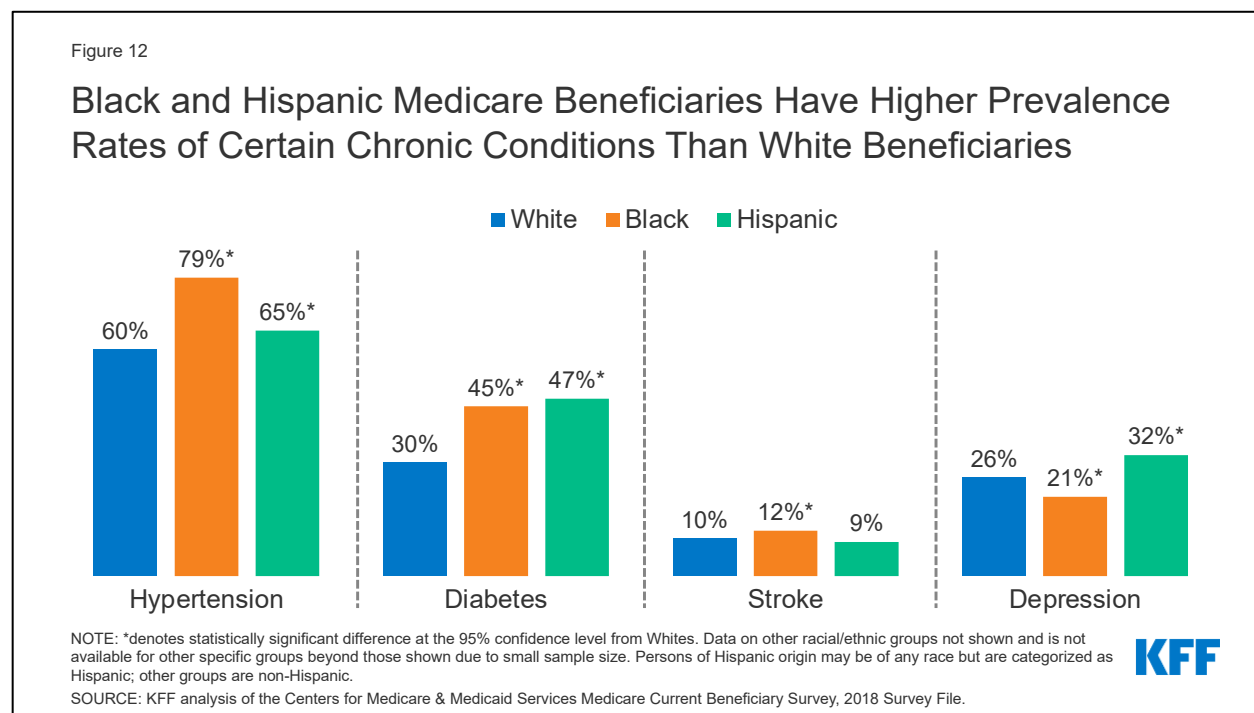
More than a third of Black and Hispanic beneficiaries (34% and 37%, respectively) report being in fair or poor health, compared to 21% of White beneficiaries (Figure 11). Black and Hispanic beneficiaries are more likely than White beneficiaries to have any limitation in activities of daily living (37%, 33%, and 27%, respectively), which is defined as difficulty performing any activities of daily living (e.g., bathing, eating). Limitations in activities of daily living are associated with increased risk of hospitalization, admission to a long-term care facility, and mortality among Medicare beneficiaries.<sup>25,26</sup> Additionally, a larger share of Black (26%) and Hispanic (28%) beneficiaries than White beneficiaries (19%) have a cognitive impairment.



### Black and Hispanic Beneficiaries have Higher Prevalence Rates of Certain Chronic Conditions Than White Beneficiaries

The prevalence of certain diseases and chronic conditions varies by race and ethnicity among Medicare beneficiaries. Hypertension is highly prevalent among all Medicare beneficiaries (63%); however, Black and Hispanic beneficiaries have higher rates of hypertension than White beneficiaries (79%, 65%, and 60%, respectively) (Figure 12, Table 3). Additionally, close to half of Black and Hispanic beneficiaries have diabetes, compared to 30% of White beneficiaries. Research has shown that among Medicare beneficiaries with diabetes, Black and Hispanic beneficiaries have the highest amputation rates.<sup>27</sup> While the prevalence of stroke is low among all Medicare beneficiaries, the rate is higher among Black beneficiaries than White beneficiaries.

For other conditions, Black and/or Hispanic beneficiaries have *lower* prevalence rates than White beneficiaries, including cancer, where prevalence rates are 15% for both Black and Hispanic beneficiaries and 19% for White beneficiaries (Table 3). While a larger share of Hispanic beneficiaries (32%) than White (26%) beneficiaries report depression, a smaller share of Black beneficiaries (21%) report depression compared to White beneficiaries. Hispanic beneficiaries have lower prevalence rates of heart disease (25%) and pulmonary disease (16%) than White beneficiaries (33% and 20%, respectively) (Table 3).

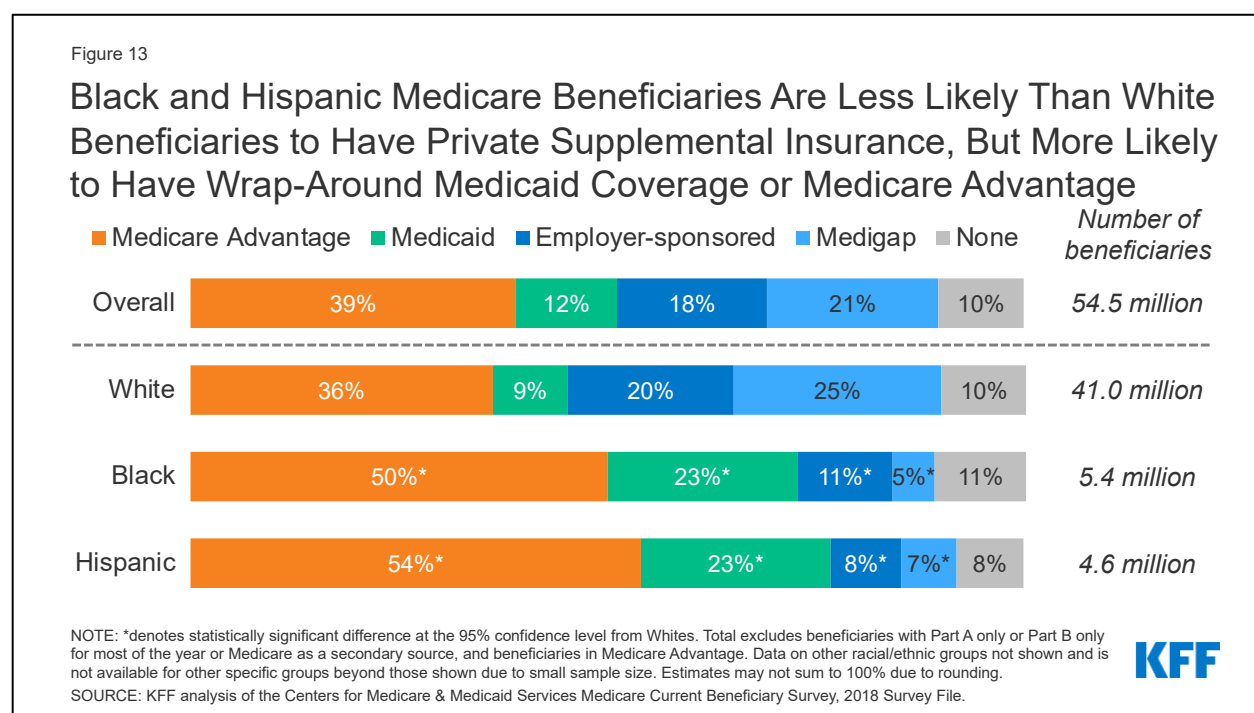


## Sources of Coverage Among Medicare Beneficiaries

### Black and Hispanic Medicare Beneficiaries Are Less Likely Than White Beneficiaries to Have Private Supplemental Insurance, but More Likely to Have Wrap-Around Medicaid coverage or Be Enrolled in Medicare Advantage

The vast majority of Medicare beneficiaries across all racial and ethnic groups have some source of supplemental coverage. However, sources of supplemental coverage in Medicare vary by race and ethnicity. While a quarter of White beneficiaries have Medigap, also known as Medicare Supplement Insurance, only 5% of Black beneficiaries and 7% of Hispanic beneficiaries do so (Figure 13, Table 2). Medigap helps to [fill in the gaps](#) in traditional Medicare by fully or partially covering Part A and Part B cost-sharing requirements. Black and Hispanic beneficiaries are also less likely than White beneficiaries to have employer or union-sponsored retiree health benefits to supplement Medicare.

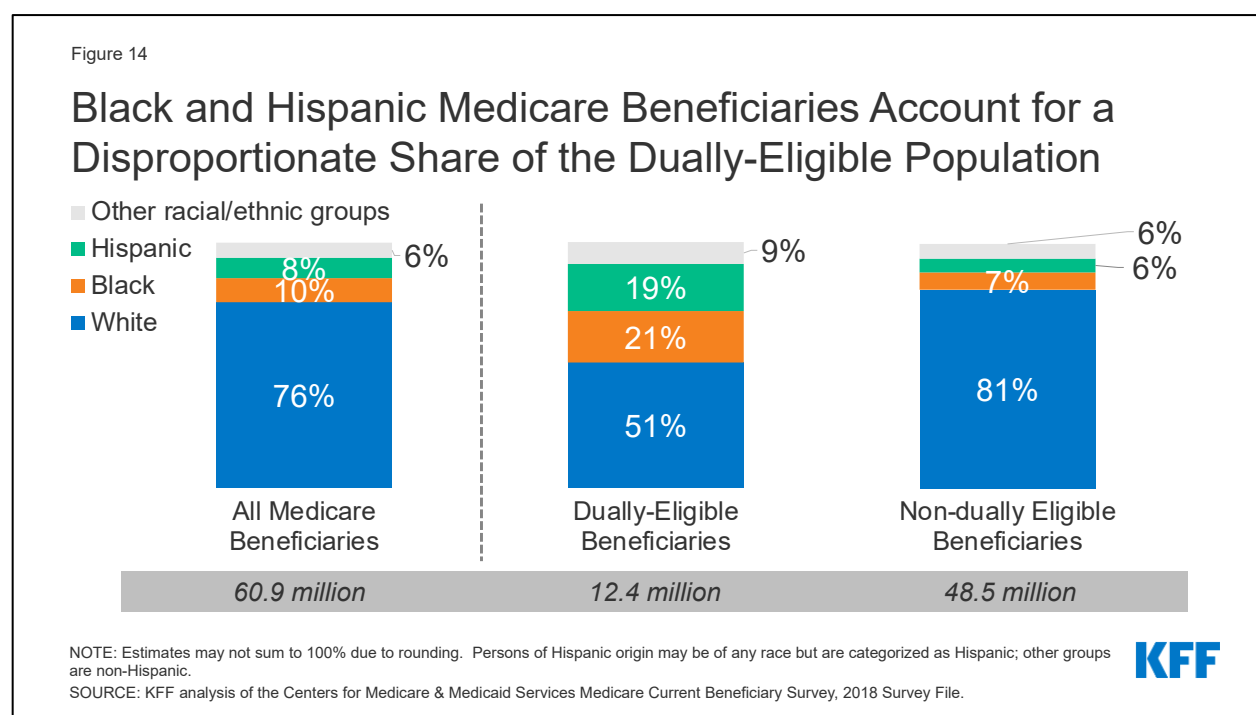
Medicaid provides supplemental coverage to nearly a quarter (23%) of Black and Hispanic beneficiaries, the federal-state program that provides coverage to low-income people, compared to just 9% of White beneficiaries. Additionally, half of Black (50%) and Hispanic (54%) beneficiaries were enrolled in a Medicare Advantage plan in 2018, as compared to just over one third of all White beneficiaries (36%).



### Black and Hispanic Beneficiaries Account for a Disproportionate Share of Beneficiaries Dually Eligible for Both Medicare and Medicaid

Medicaid, the federal-state program that provides coverage to low-income people, is a source of supplemental coverage for Medicare beneficiaries with low incomes and modest assets. Most dually eligible beneficiaries receive both full Medicaid benefits, including long-term services and supports, and payment of their Medicare premiums and cost sharing. Others do not qualify for full Medicaid benefits, but Medicaid covers their Medicare premiums and/or cost sharing through the Medicare Savings Programs.

Together, Black and Hispanic beneficiaries account for 18% of the total Medicare population, but 40% of the Medicare-Medicaid dually eligible population (Figure 14). Compared to all traditional Medicare beneficiaries, dual-eligible beneficiaries are [more likely](#) to report poor/fair health status, have lower income, and qualify for Medicare due to a permanent disability.

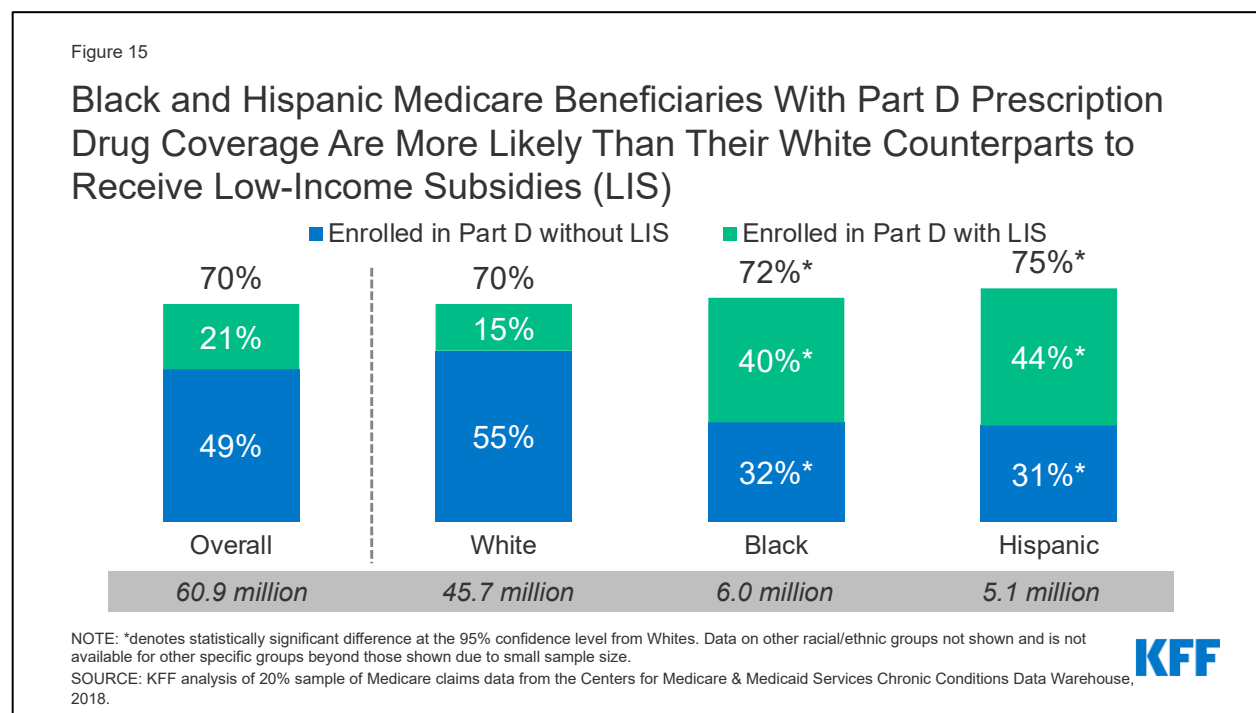




### Black and Hispanic Medicare Beneficiaries With Part D Prescription Drug Coverage Are More Likely Than Their White Counterparts to Receive Low-Income Subsidies

The Medicare Part D program provides outpatient prescription drug coverage to Medicare beneficiaries. The majority (70%) of Medicare beneficiaries were enrolled in a Part D drug plan in 2018, with rates of Part D enrollment higher among Black (72%) and Hispanic (75%) beneficiaries than White beneficiaries (70%) (Figure 15).

This may be partly a function of higher rates of enrollment in Medicaid among Black and Hispanic Medicare beneficiaries than among White beneficiaries, since dual-eligible beneficiaries are automatically enrolled in the Part D program and the Part D Low-Income Subsidy (LIS) program, which provides assistance with Part D premiums and cost sharing. Substantially larger shares (40% and 44%, respectively) of all Black and Hispanic beneficiaries were enrolled in Part D and received premium and cost-sharing assistance through the LIS program, compared to 15% of White beneficiaries.

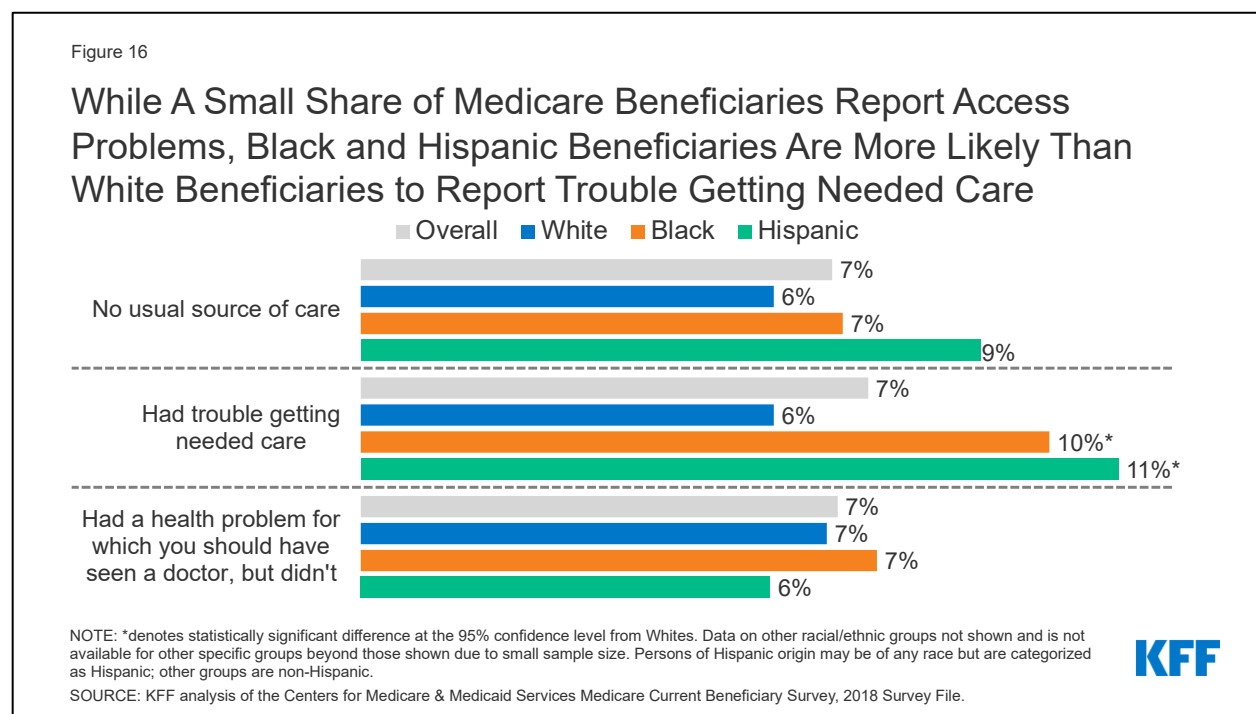


## Access to Care and Service Utilization

### While a Small Share of Medicare Beneficiaries Overall Report Access Problems, Black and Hispanic Beneficiaries are More Likely than White Beneficiaries to Report Trouble Getting Needed Care

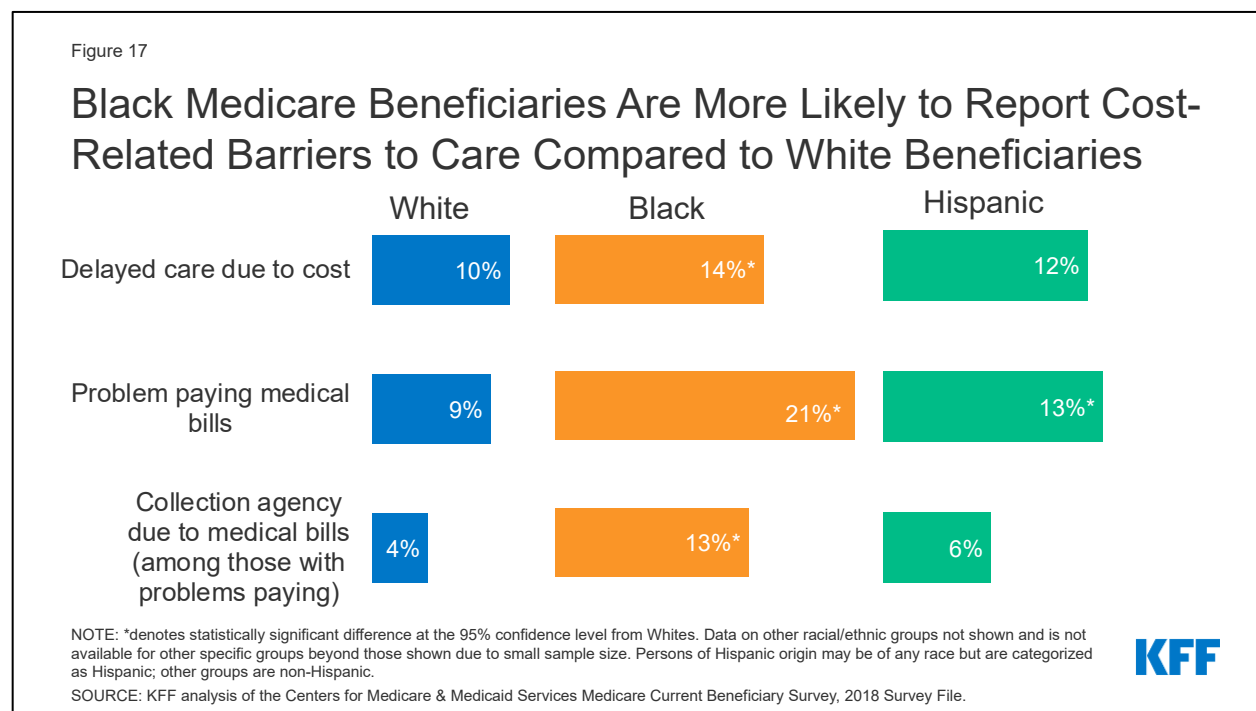
Overall, relatively few Medicare beneficiaries report problems with access to care, with no significant differences across racial and ethnic groups in the share of beneficiaries without a usual source of care or in the share of beneficiaries delaying needed care. These findings illustrate the importance of health insurance coverage in ensuring access to care and mitigating racial and ethnic disparities in some measures of access.

However, a larger share of Black (10%) and Hispanic (11%) beneficiaries than White beneficiaries (6%) report trouble getting needed care (Figure 16). Recent analysis by [the Medicare Payment Advisory Commission \(MedPAC\)](#) found that in 2019, among Medicare beneficiaries ages 65 and older, people of color were more likely than White beneficiaries to report unwanted delays in getting an appointment and problems finding a new specialist. This pattern was also observed among privately insured adults ages 50-64.



### Black Medicare Beneficiaries Are More Likely to Report Cost-Related Barriers to Care Compared to White Beneficiaries

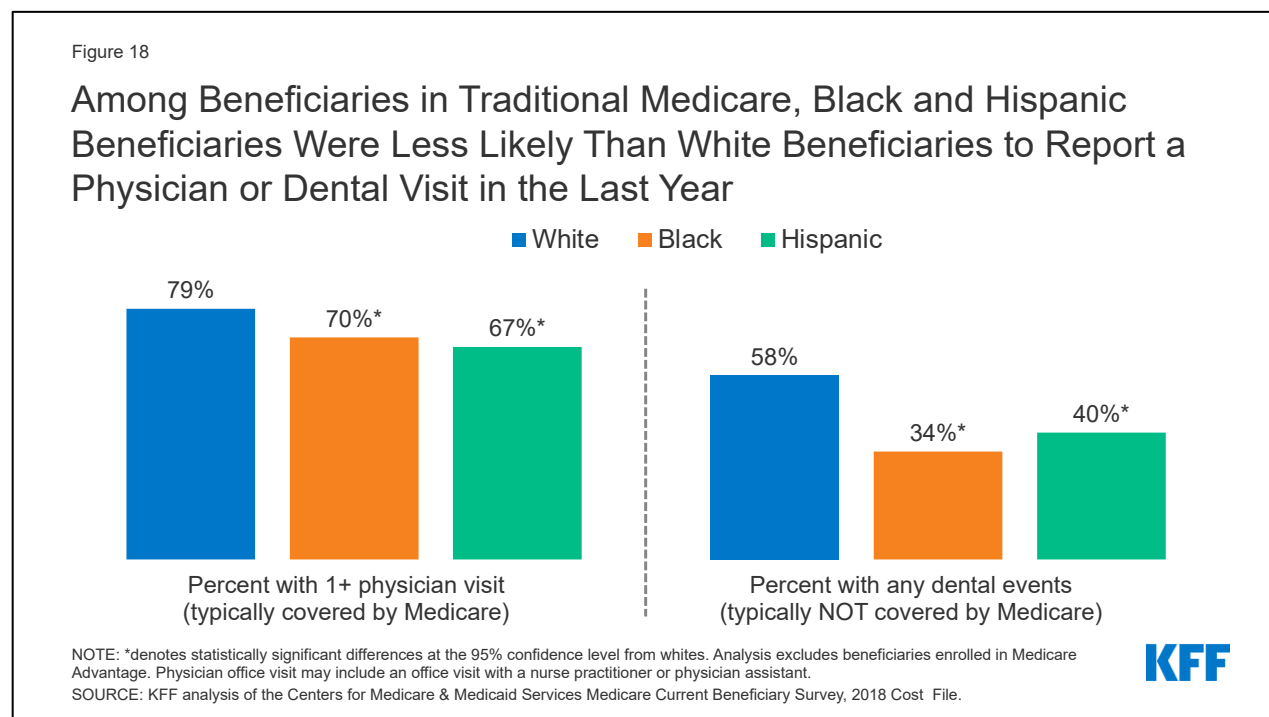
A larger share of Black and Hispanic beneficiaries than White beneficiaries report problems paying medical bills (21%, 13%, and 9%, respectively) and delaying care due to cost (14%, 12%, and 10% respectively). Among those with problems paying medical bills, a larger share of Black beneficiaries report debt to collection agencies due to medical bills than White beneficiaries (13% versus 4%, respectively) (Figure 17).



**Among Beneficiaries in Traditional Medicare, Black and Hispanic Beneficiaries Were Less Likely Than White Beneficiaries to Report a Physician or Dental Visit in the Last Year**

The majority of all beneficiaries in traditional Medicare saw at least one physician in 2018. However, the rate was lower among Black and Hispanic beneficiaries than among White beneficiaries (70% and 67%, respectively, compared to 79%). (Figure 18).

While traditional Medicare provides coverage for an array of medical services, it does not cover routine dental care. Consequently, in 2018, just over half (54%) of the Medicare population saw a dentist in the past year, with lower rates among Black beneficiaries (34%) and Hispanic beneficiaries (40%) than among White beneficiaries (58%) (Table 5).

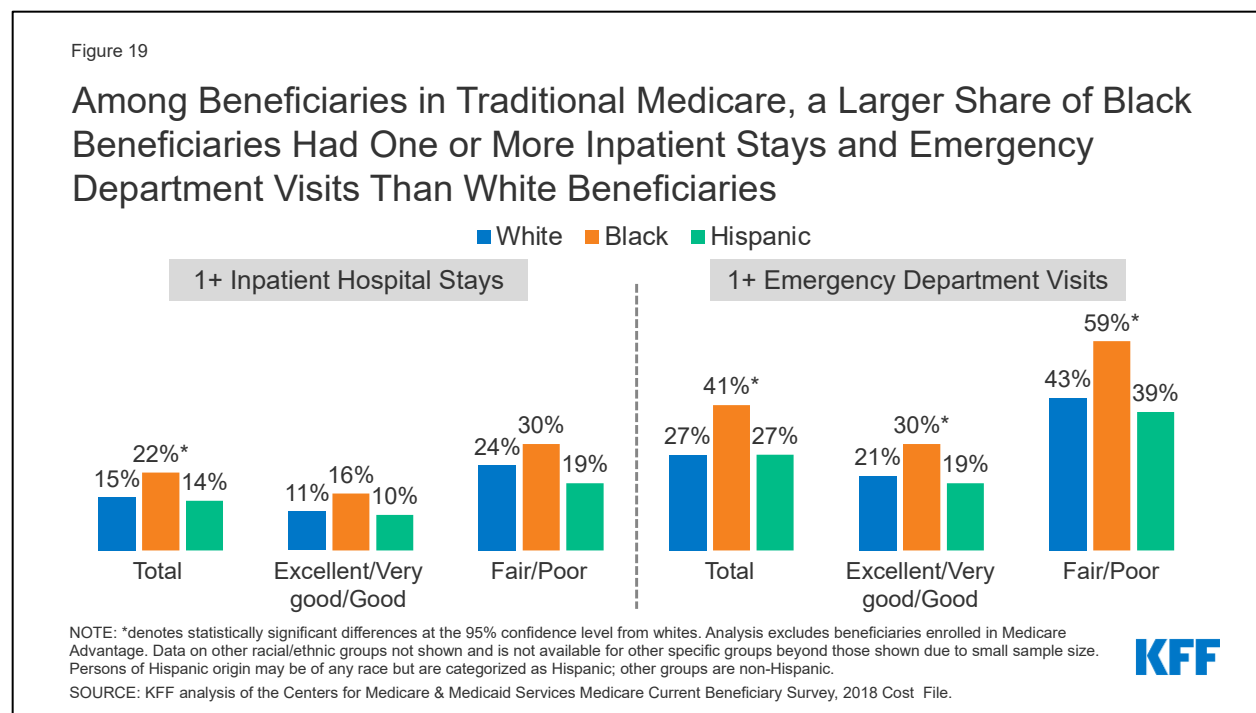




### Among Beneficiaries in Traditional Medicare, a Larger Share of Black Beneficiaries Had One or More Inpatient Stays and Emergency Department Visits Than White Beneficiaries

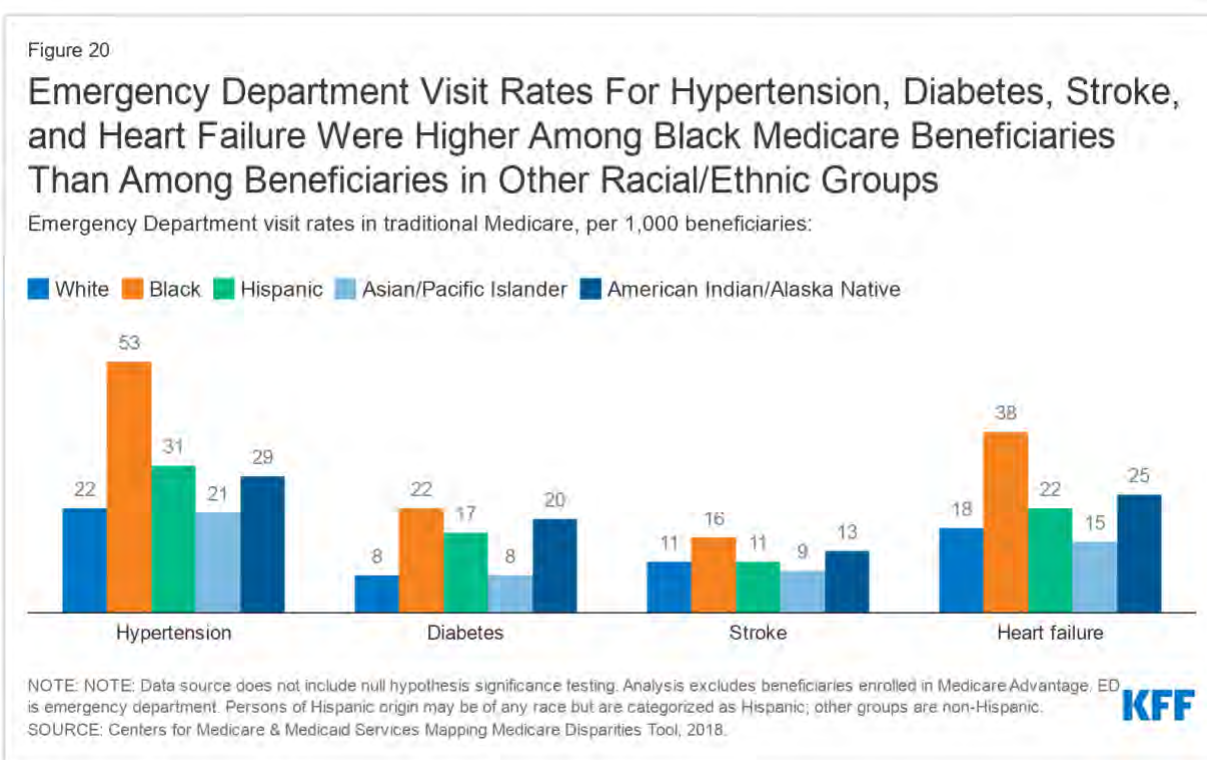
Among beneficiaries in traditional Medicare, a larger share of Black beneficiaries had an inpatient hospital stay than White beneficiaries (22% versus 15%, respectively) (Figure 19). The share of beneficiaries reporting at least two inpatient stays was also higher among Black beneficiaries (7%) than among White beneficiaries (4%) (Table 5). Racial/ethnic differences in inpatient stays (1+ days and 2+ days) did not differ significantly by self-reported health status.

A larger share of Black beneficiaries had one or more emergency department (ED) visits compared to White beneficiaries (41% versus 27%, respectively). In contrast to inpatient hospital stays, racial differences in ED visit rates by self-reported health status were observed. Specifically, Black beneficiaries in fair/poor health status were more likely than White beneficiaries of similar health status to report any emergency department visit (59% versus 43%, respectively). But even among Medicare beneficiaries in relatively better health (defined as excellent, very good, or good self-reported health status), Black beneficiaries were more likely than White beneficiaries to have an emergency department visit (30% vs. 21%, respectively). Additionally, the share of Black beneficiaries with two or more ED visits (24%) was twice as large as the share among White beneficiaries (12%).



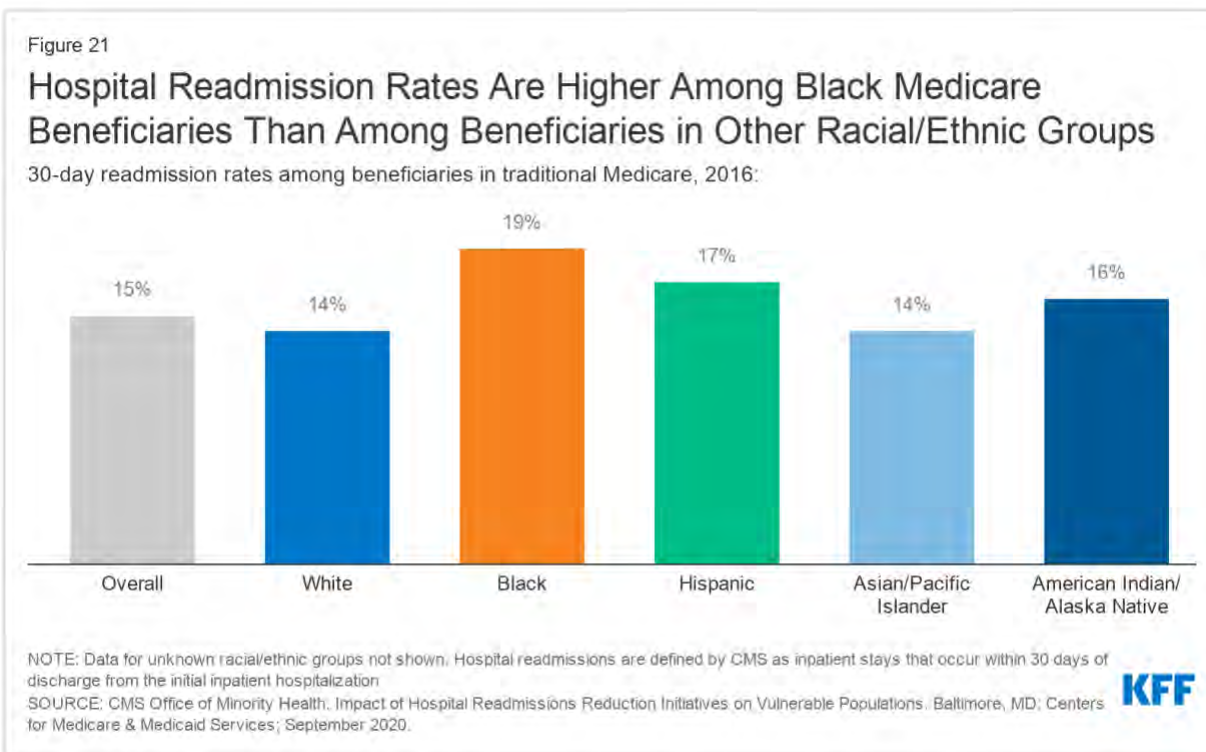
### Emergency Department Visit Rates for Hypertension, Diabetes, Stroke, and Heart Failure were Higher among Black Medicare Beneficiaries than Beneficiaries in Other Racial and Ethnic Groups

Among Medicare beneficiaries diagnosed with hypertension, the rate of ED visits among Black beneficiaries (53 per 1,000 people) was at least double the rates among White and Asian beneficiaries (22 and 21 visits per 1,000 people, respectively) and nearly double the rates among Hispanic and American Indian and Alaska Native beneficiaries (Figure 20). Among beneficiaries diagnosed with diabetes, ED visit rates among Black, Hispanic, and American Indian and Alaska Native beneficiaries (22, 17, and 20 visits per 1,000 beneficiaries, respectively) were at least double the rates among White and Asian beneficiaries (8 visits per 1,000 beneficiaries). Asian and Pacific Islander beneficiaries had lower ED visit rates for hypertension, diabetes, stroke, and heart failure compared to beneficiaries in other racial and ethnic groups.



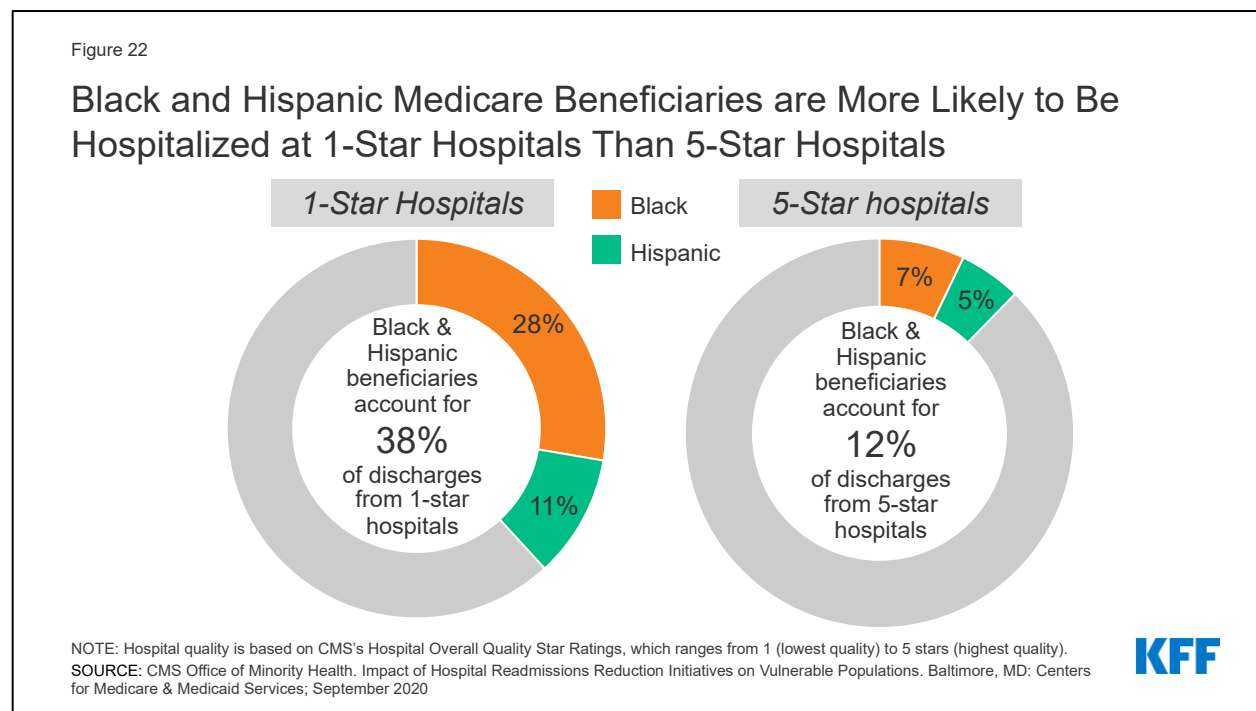
### Hospital Readmission Rates are Higher among Black Medicare Beneficiaries than Beneficiaries in Other Racial and Ethnic Groups

The [Hospital Readmissions Reduction Program \(HRRP\)](#), which has been in place since 2012, aims to reduce avoidable hospital readmission rates and improve quality of care by imposing payment penalties on hospitals with excess readmission rates for certain health conditions. In 2018, [30-day readmission rates](#) among Medicare beneficiaries in traditional Medicare were higher among Black beneficiaries (19%) than among White beneficiaries (14%), Hispanic beneficiaries (17%), Asian/Pacific Islander beneficiaries (14%), and American Indian/Alaska Native beneficiaries (16%) (Figure 21). Black beneficiaries had higher odds of being readmitted to a hospital than White beneficiaries, regardless of diagnosis during the first hospitalization or discharge setting.



### Black and Hispanic Medicare Beneficiaries are More Likely to be Hospitalized at 1-Star Hospitals than 5-Star Hospitals

[CMS's overall hospital quality star rating](#) summarizes hospital performance on various measures, such as rates of readmissions, healthcare-associated infections, and value of care for certain health conditions (e.g., pneumonia) into a single star rating for each hospital, which ranges from 1 star (lowest quality) to 5 stars (highest quality). In 2018, Black and Hispanic beneficiaries accounted for 28% and 11% of [discharges from 1-star hospitals](#), respectively, but only 7% and 5% of discharges from 5-star hospitals, respectively (Figure 22).



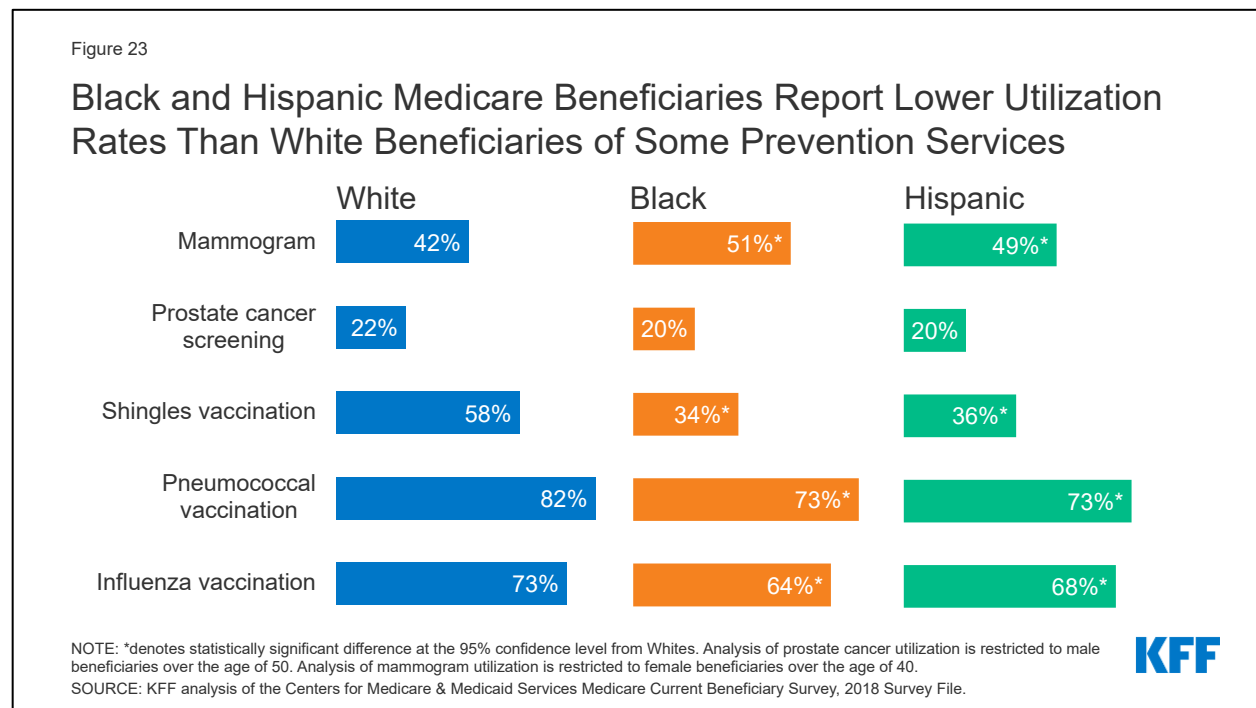


### Black and Hispanic Beneficiaries Report Lower Utilization Rates Than White Beneficiaries of Some Prevention Services

Medicare provides coverage for a wide range of preventive and screening services, including a “Welcome to Medicare” physical exam during the first year of Medicare enrollment, immunization for various conditions (including influenza), and screening exams for cancers.

Overall, less than a quarter (21%) of male beneficiaries ages 50 and older reported receiving a prostate cancer screening, with no statistically significant differences by race or ethnicity (Figure 23). Less than half (43%) of all female beneficiaries ages 40 and older reported receiving a mammogram in the past year, with Black and Hispanic beneficiaries being more likely than White beneficiaries to receive a mammogram in the past year (51%, 49%, 42%, respectively).

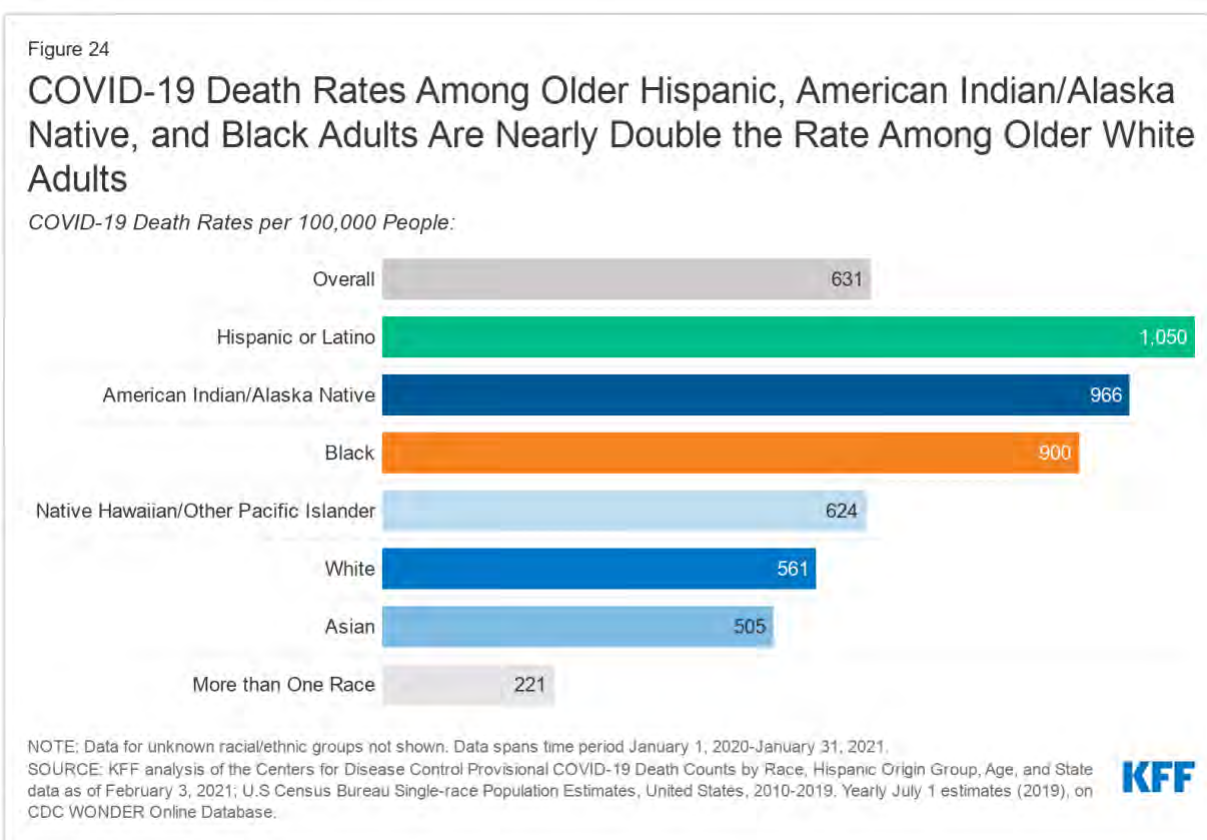
Notable racial and ethnic disparities in immunization rates were also observed among Medicare beneficiaries. Smaller shares of Black and Hispanic beneficiaries reported receiving a flu vaccination than White beneficiaries (64%, 68%, and 73%, respectively). Research has shown that the gap in flu vaccination is even greater when it comes to receipt of high-dose influenza vaccine,<sup>28</sup> which is [specifically targeted](#) to adults ages 65 and older. Additionally, compared to White beneficiaries, Black and Hispanic beneficiaries had lower rates of pneumococcal vaccination and shingles vaccination. [Several potential factors](#) may contribute to racial and ethnic disparities in vaccination uptake, [including, but not limited to](#), differential access to and use of preventive health care services, concerns or misconceptions about vaccine safety, and persistent medical mistrust rooted in a history of racial discrimination and mistreatment in the health care sector.



## COVID-19

### COVID-19 Death Rates Among Hispanic, American Indian/Alaska Native, and Black Adults Ages 65 and Older are Nearly Double the Rate Among Older White Adults

People of color have experienced disproportionate rates of COVID-19 cases, hospitalizations, and deaths. Specifically, among adults ages 65 and older, the mortality rates per 100,000 people were higher for older Hispanic adults (1,050 deaths per 100,000), older American Indian/Alaska Native adults (966 deaths per 100,000), and older Black adults (900 deaths per 100,000) than for older White adults (561 deaths per 100,000) (Figure 24).



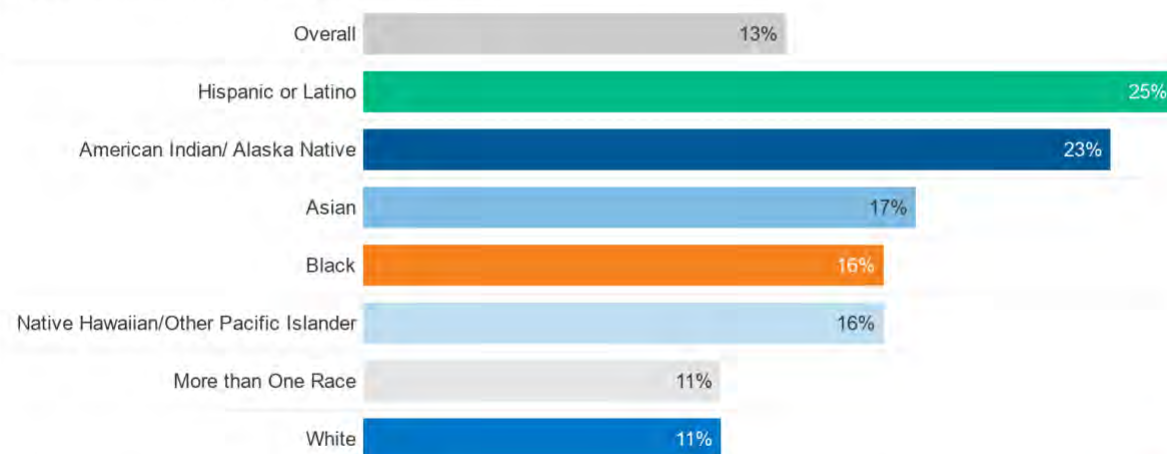
**Among Adults Ages 65 and Older, COVID-19 Represents a Larger Share of Deaths Among People of Color than White People Since January 2020**

Among older Hispanic adults, COVID-19 deaths account for 25% of all causes of death—2.3 times higher than the share among older White adults (11%) (Figure 25). For older American Indian/Alaska Native, Asian, Black, and Native Hawaiian or Other Pacific Islander adults, COVID-19 deaths account for 23%, 17%, 16%, and 16% of deaths from all causes, respectively.

Figure 25

**Among Adults Ages 65 and Older, COVID-19 Represents a Larger Share of Deaths Among People of Color Than Among White Adults**

*COVID-19 Deaths as a Share of All Causes of Death:*



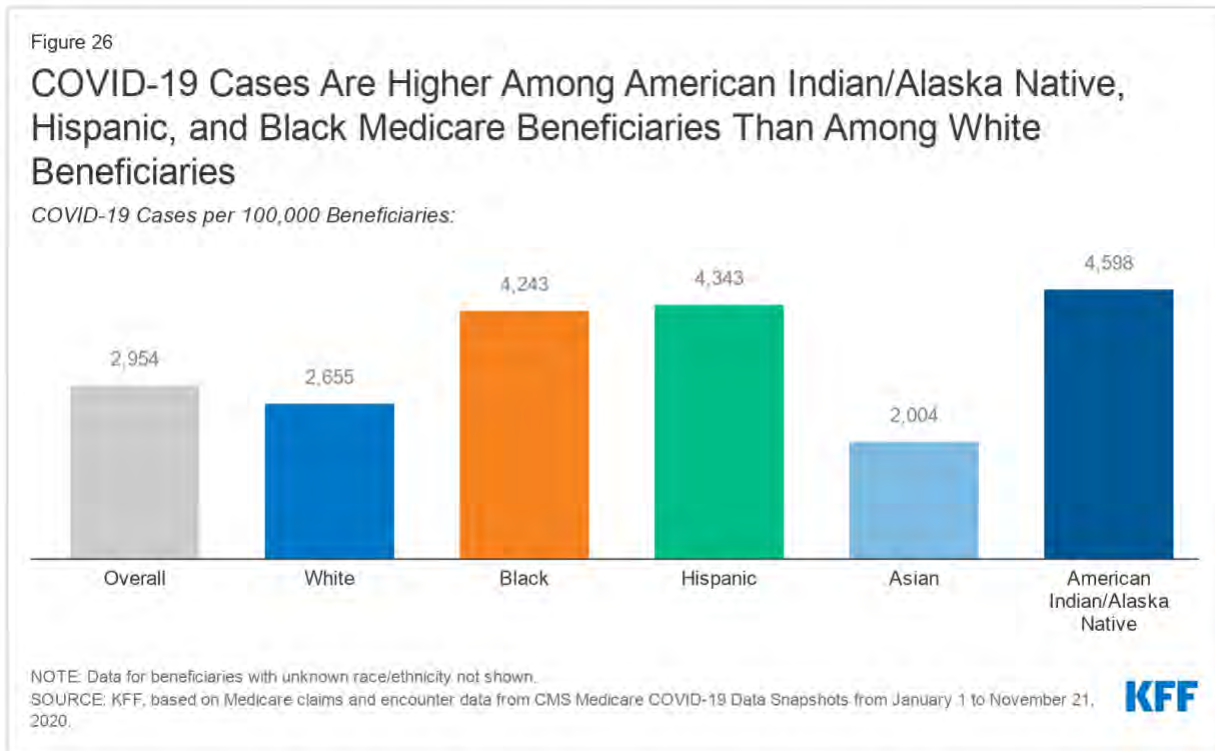
NOTE: Data for unknown racial/ethnic groups not shown. Data spans time period January 1, 2020-January 31, 2021.

SOURCE: KFF analysis of the Centers for Disease Control Provisional COVID-19 Death Counts by Race, Hispanic Origin Group, Age, and State data as of February 3, 2021.

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### COVID-19 Cases Are Higher Among American Indian/Alaska, Hispanic, and Black Beneficiaries Than Among White Beneficiaries

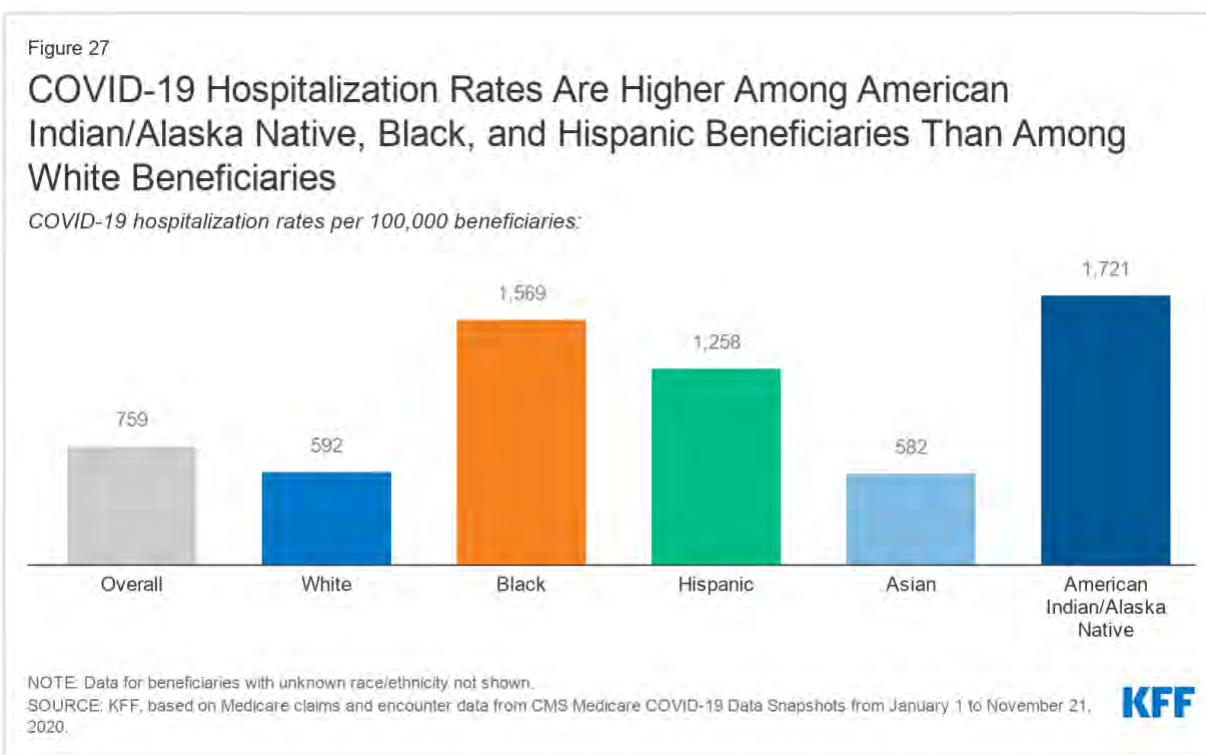
From January 1 to November 21, 2020, COVID-19 cases among American Indian and Alaska Native, Black, and Hispanic Medicare beneficiaries (4,598, 4,343, and 4,243 cases per 100,000 respectively) were 1.7, 1.6, and 1.6 times higher, respectively, than among White beneficiaries (2,655 cases per 100,000) (Figure 26).





### COVID-19 Hospitalization Rates Are Higher Among American Indian/Alaska Native, Black, and Hispanic Beneficiaries Than Among White Beneficiaries

From January 1, 2020 to November 21, 2020, hospitalization rates for American Indian/Alaska Native, Black, and Hispanic Medicare beneficiaries were 2.9 times, 2.7 times, and 2.1 times respectively, higher than White beneficiaries (592 hospitalizations per 100,000) (Figure 27).

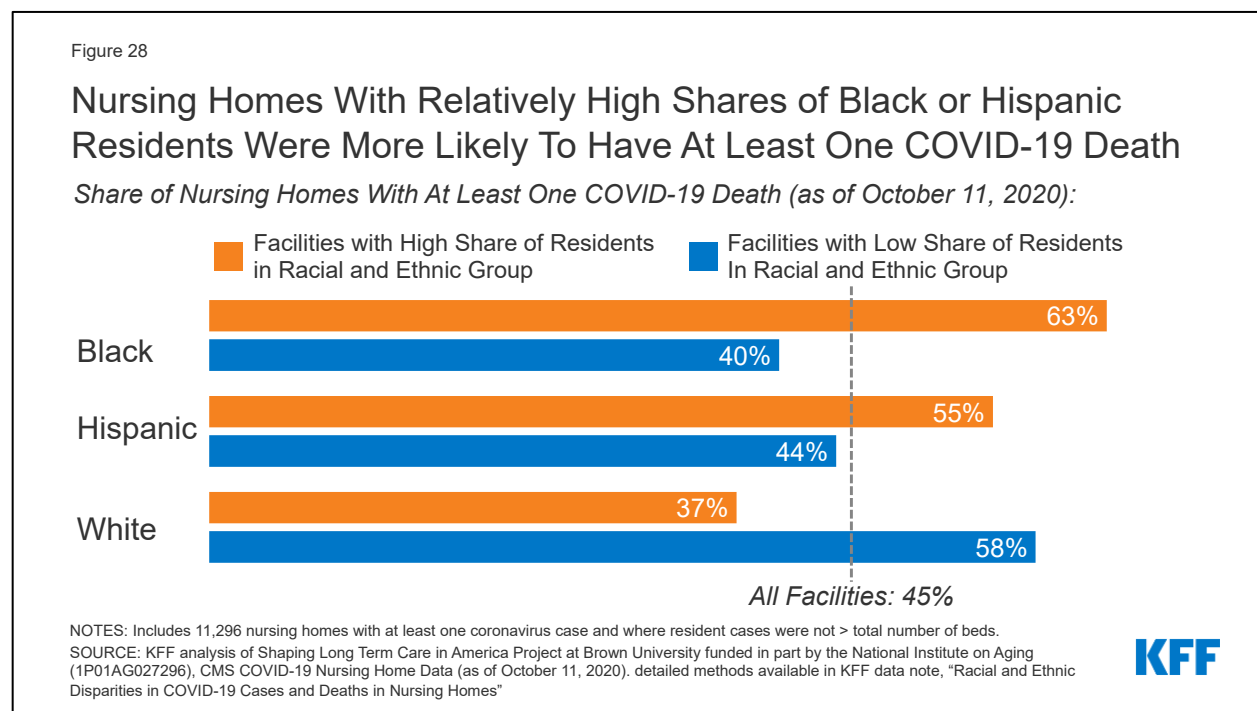


[Analysis of patient data from health records](#) shows that in addition to having higher rates of infections, hospitalizations, and mortality, people of color have been more likely to require more intensive level of treatment at the time of COVID-19 diagnosis, such as inpatient hospitalization or the use of oxygen and ventilation. Further, the COVID-19 pandemic has exacerbated mental health outcomes among older Hispanic adults, with older Hispanic adults [reporting](#) higher rates of depression or anxiety (33%) than older White (23%), Black (26%), and Asian (17%) adults.

[The CARES Act](#) includes a provision requiring Medicare Part B to cover a vaccine for COVID-19 at no cost to Medicare beneficiaries. However, [35% of Black adults ages 18 and older say they](#) would definitely or probably not get a vaccine even if it was deemed safe by scientists and offered at no cost, with about half (48%) saying they are not confident that the needs of Black people are being accounted for in the COVID-19 vaccine development process. This finding reflects well-founded medical mistrust among African Americans, based on a history of racial abuse and malpractice within the medical system, as exemplified by the [Tuskegee syphilis experiment](#), involuntary medical experimentation of Henrietta Lacks,<sup>29</sup> and ongoing forms of medical racism, such as [under prescribing of pain medications](#) for Black people due to racial bias.

### Nursing Homes with Relatively High Shares of Black or Hispanic Residents Were More Likely to Have At Least One COVID-19 Death

Older adults in long-term care facilities, such as nursing homes, have also been disproportionately impacted by the COVID-19 pandemic, with [long-term facilities](#) accounting for 7% of total cases and 40% of total deaths in the U.S. More than half of nursing homes with a high share ([defined as 20% or more of residents](#)) of Black residents (63%) and Hispanic residents (55%) reported at least one COVID-19 death, compared to 37% of nursing homes with a high share of White residents (Figure 28).



Nancy Ochieng, Juliette Cubanski, Tricia Neuman, and Samantha Artiga are with KFF. Anthony Damico is an independent consultant.

## Methods

### Data Sources Used in Analysis

The Centers for Medicare & Medicaid Services (CMS) 2018 Chronic Conditions Data Warehouse (CCW) was used to provide state-level estimates of the Medicare population, by race and ethnicity.

The CMS Medicare Current Beneficiary Survey (MCBS) 2018 Survey File was used to describe Medicare beneficiary characteristics, supplemental coverage, and access to care. The analysis on supplemental coverage was limited to beneficiaries enrolled in Part A and Part B for most months of the year, excluding those with Part A or Part B only and Medicare as a Secondary Payer for most months of the year. The MCBS 2018 Cost Supplement File was used to describe service utilization among Medicare beneficiaries in fee-for-service (FFS).

Analysis on Medicare Part D enrollment was based on prescription drug event claims data from a sample of Medicare beneficiaries (20% sample for 2018) from the CMS Chronic Conditions Data Warehouse (CCW).

The CMS Office of Minority Health's [Mapping Medicare Disparities Tool](#), which uses 2018 administrative claims data from the Chronic Conditions Warehouse, was used to describe emergency department visit rates. This data was limited to Medicare beneficiaries enrolled in FFS. Medicare Advantage enrollees were excluded from this analysis because claims data are not available for these beneficiaries.

The CMS Office of Minority Health's report, [Impact of Hospital Readmissions Reduction Initiatives on Vulnerable Populations](#), which uses 2016 administrative claims data from the CCW, was used to describe 30-day hospital inpatient readmissions in Medicare FFS beneficiaries.

Urban Institute's Dynamic Simulation of Income Model (DYNASIM4) was used to describe Medicare beneficiaries' income and assets in 2019. Detailed methodology is previously discussed [here](#).

The 2018-2020 Current Population Survey March Annual Social and Economic Supplement (CPS ASEC) was used to provide subgroup estimates of poverty under the official and supplemental poverty measure over the period of 2017-2019. The 2020 CPS-ASEC was used to produce poverty rates for all older adults in 2019. The poverty rates presented in this analysis apply to the non-institutionalized Medicare population. The CPS ASEC poverty thresholds are different from the Health and Human Services (HHS) poverty guidelines (sometimes referred to as the "federal poverty level"). Detailed methodology is previously discussed [here](#).

Data from the U.S Census Bureau's [2017 National Population Projection Main Series](#) was used for U.S population estimates among people ages 65 and over.

Elizabeth Arias and Jiaquan Xu, "United States Life Tables, 2018" *National Vital Statistics Reports* 69, no. 12 (November 2020) was used to describe life expectancy at age 65 by race and gender.

Data on COVID-19 cases and hospitalization rates among Medicare beneficiaries were obtained from CMS' Preliminary Medicare COVID-19 Data Snapshot ( <https://www.cms.gov/research-statistics-data-systems/preliminary-medicare-covid-19-data-snapshot>).

Data on COVID-19 deaths among adults ages 65 and over were obtained from the Centers for Disease Control and Prevention, "Deaths involving coronavirus disease 2019 (COVID-19) by race and Hispanic origin group and age, by state" as of February 3, 2021 ( <https://data.cdc.gov/NCHS/Deaths-involving-coronavirus-disease-2019-COVID-19/ks3g-spdg>). The CDC WONDER online database was used to obtain 2019 U.S Census Bureau single-race population estimates in order to calculate death rates per 100,000 people.

## Tables

See [online version of this report](#) for tables.



## Endnotes

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# Thirty-Day Readmission Rates for Medicare Beneficiaries by Race and Site of Care

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E. John Orav, PhD

Ashish K. Jha, MD, MPH

**R**ACIAL DISPARITIES IN HEALTH care are well documented,<sup>1</sup> and eliminating them remains a national priority.<sup>2</sup> Reducing readmissions has become a policy focus because it represents an opportunity to simultaneously improve quality and reduce costs, yet little is known about racial disparities in this area. While at least one study has found that in aggregate, across all conditions, black patients have slightly increased odds of readmission,<sup>3</sup> others have found no such association.<sup>4</sup> We are unaware of prior work on racial disparities in readmission rates at the national level for common medical conditions.

Beyond simply describing whether disparities exist, there is also an increasing urgency to understand why these disparities exist. One possibility is that site of care plays a role. Prior studies have found that care for minorities is highly concentrated: a small number of hospitals provide a disproportionate share of the care for minority patients, and these hospitals appear to have worse performance on processes of care,<sup>5-8</sup> although data on outcomes are mixed.<sup>4,9,10</sup> Thus, if black patients have higher readmission rates than white patients, it may be because these patients receive care at low-quality hospitals rather than because of race itself.

Understanding whether, and why, black patients have higher readmis-

**Context** Understanding whether and why there are racial disparities in readmissions has implications for efforts to reduce readmissions.

**Objective** To determine whether black patients have higher odds of readmission than white patients and whether these disparities are related to where black patients receive care.

**Design** Using national Medicare data, we examined 30-day readmissions after hospitalization for acute myocardial infarction (MI), congestive heart failure (CHF), and pneumonia. We categorized hospitals in the top decile of proportion of black patients as minority-serving. We determined the odds of readmission for black patients compared with white patients at minority-serving vs non-minority-serving hospitals.

**Setting and Participants** Medicare Provider Analysis Review files of more than 3.1 million Medicare fee-for-service recipients who were discharged from US hospitals in 2006-2008.

**Main Outcome Measure** Risk-adjusted odds of 30-day readmission.

**Results** Overall, black patients had higher readmission rates than white patients (24.8% vs 22.6%, odds ratio [OR], 1.13; 95% confidence interval [CI], 1.11-1.14;  $P < .001$ ); patients from minority-serving hospitals had higher readmission rates than those from non-minority-serving hospitals (25.5% vs 22.0%, OR, 1.23; 95% CI, 1.20-1.27;  $P < .001$ ). Among patients with acute MI and using white patients from non-minority-serving hospitals as the reference group (readmission rate 20.9%), black patients from minority-serving hospitals had the highest readmission rate (26.4%; OR, 1.35; 95% CI, 1.28-1.42), while white patients from minority-serving hospitals had a 24.6% readmission rate (OR, 1.23; 95% CI, 1.18-1.29) and black patients from non-minority-serving hospitals had a 23.3% readmission rate (OR, 1.20; 95% CI, 1.16-1.23;  $P < .001$  for each); patterns were similar for CHF and pneumonia. The results were unchanged after adjusting for hospital characteristics including markers of caring for poor patients.

**Conclusion** Among elderly Medicare recipients, black patients were more likely to be readmitted after hospitalization for 3 common conditions, a gap that was related to both race and to the site where care was received.

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sion rates for common, publicly reported conditions can help improve the design of interventions that target the most vulnerable patients and hospitals. Therefore, we sought to answer 3 questions: first, are there disparities in readmission rates between elderly black and white patients admitted for acute myocardial infarction (MI), congestive heart failure (CHF), or pneumonia? Second, if these disparities exist, are they related primarily to race itself or primarily to the site where care is

provided? And finally, if disparities based on the site of care do exist, are they associated with particular structural features of the hospitals that disproportionately care for minorities

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## READMISSION RATES FOR OLDER US PATIENTS

(such as size or teaching status), or markers of financial stress, such as public ownership or disproportionately caring for the poor?

## METHODS

### Data

We used the Medicare Provider Analysis Review (MedPAR) 100% files to examine all hospitalizations with the primary discharge diagnoses of acute MI, CHF, or pneumonia occurring between January 1, 2006, and November 30, 2008 (*International Classification of Diseases, Ninth Revision, Clinical Modification* [ICD-9] codes for acute MI, 410.xx, excluding 410.x2; for CHF, 398.91, 404.x1, 404.x3, and 428.0-428.9; and for pneumonia, 480-486), for Medicare fee-for-service beneficiaries aged 65 years or older. Discharges occurring in December 2008 were excluded because we lacked a full 30 days of follow-up. Only patients surviving to discharge were included.

We excluded patients discharged from federal hospitals and those located outside the 50 states and the District of Columbia. Our final sample consisted of 3 163 011 discharges: for acute MI, 579 492 discharges from 4322 hospitals; for CHF, 1 346 768 discharges from 4560 hospitals; and for pneumonia, 1 236 751 discharges from 4588 hospitals. Patient race was categorized based on self-report, and, as has been the convention in other studies using these data, nonblack patients were categorized as white.<sup>11,12</sup>

We used the 2007 American Hospital Association survey to identify hospitals' size, nurse-to-census ratio, ownership, proportion of hospitalized patients with Medicaid or Medicare, membership in a hospital system, teaching status, location, and census region. Nurse-to-census ratios were calculated by dividing the number of full-time equivalent nurses by 1000 patient-days.<sup>13</sup> We obtained hospitals' Disproportionate Share Index (a marker of caring for the poor) from the Medicare Impact File. We examined, using the Hospital Quality Alliance (HQA) data, each hospital's performance on processes of care during

2007 and assigned a summary score to each hospital for each condition using standard methods (eTable 1, available at <http://www.jama.com>).<sup>14</sup>

### Risk-Adjusted Odds of Readmission

Our primary outcome was risk-adjusted odds of all-cause 30-day readmission; the unit of analysis was the patient. We also examined risk-adjusted 30-day readmissions with the same diagnosis as the index admission. Each patient's likelihood of readmission was adjusted using the Elixhauser risk-adjustment scheme, a validated tool developed by the Agency for Healthcare Research and Quality (AHRQ) that was designed to be used with administrative data.<sup>15-17</sup> The Elixhauser approach has been widely used in the field,<sup>18-23</sup> and details are provided in the eAppendix and eTable 2. In a sensitivity analysis, we used the Charlson comorbidity index for the risk adjustments; the results were very similar, so we present only the Elixhauser-adjusted model.

### Identifying Minority-Serving Hospitals

For each hospital, we calculated the proportion of its Medicare patients who are black and categorized institutions in the highest decile of proportion of black patients as minority serving; the other 90% of hospitals were categorized as nonminority serving. In sensitivity analyses, we examined alternative cut points including the highest quartile and highest 5%; the results were similar, so we present only the results using the highest decile as the cut point.

### Analysis

We compared the characteristics of black vs white patients for each condition and the characteristics of minority vs non-minority-serving hospitals using Wilcoxon tests for continuous data and  $\chi^2$  tests for categorical data. For our primary outcome, risk-adjusted odds of readmission, we created multivariate patient-level logistic regression models; all models included within-hospital clustering. For each condition, we first examined patient

race as the primary predictor of readmission and then site of care (minority-serving vs non-minority-serving hospital) as the primary predictor; we then added both patient race and site of care to the model to evaluate their relative contribution to the model of readmission rates. We tested for an interaction between race and site of care for each condition.

We then categorized all patients into 4 categories that we had defined a priori: black patients at minority-serving hospitals, white patients at minority-serving hospitals, black patients at non-minority-serving hospitals, and white patients at non-minority-serving hospitals. We ran logistic regression models using indicator variables to examine the relationship between these groups and odds of readmission, first using only age for risk-adjustment (model 1), and next using our formal risk-adjustment scheme<sup>15,16</sup> (model 2). We added discharge destination (home, nursing or rehabilitation facility, hospice, or other) to our model for each condition, as well as length of stay, to address possible confounding by these factors (model 3),<sup>24,25</sup> and then added hospital characteristics including size, system membership, teaching status, ownership, location, and region (model 4). We then added the proportion of Medicaid patients and each hospital's Disproportionate Share Index<sup>26,27</sup> as proxies for the proportion of poor patients a hospital serves (model 5).<sup>28</sup> Finally, we further adjusted for condition-specific HQA scores.

### Sensitivity Analyses

We performed a number of sensitivity analyses. We excluded Hispanics, Asian Americans, and other racial/ethnic groups (4.4% of the patient sample). Furthermore, to address the concern that black patients were less likely to die in the 30 days following an admission and thus might be more likely to be readmitted based on this fact alone, we performed 2 related analyses. First, we censored patients who died between discharge and 30 days of follow-up. Next, we used a composite end point of all-

cause death or readmission in 30 days as our primary outcome. We also added each patient's number of admissions for the prior year and in-hospital procedures into the model.

To account for multiple comparisons, we considered a 2-sided *P* value of less than .008 to be significant. All statistical analyses were performed using SAS software version 9.2 (SAS Institute Inc, Cary, North Carolina). This study was granted exemption by the Harvard School of Public Health Institutional Review Board.

## RESULTS

### Patient Characteristics

Of the 3 163 011 discharges in our sample, 276 681 (8.7%) were for black patients and 2 886 330 (91.3%) were for white patients. For each condition, black patients were younger; more often women; and more likely to have dia-

betes, hypertension, chronic kidney disease, and obesity and were less likely to have chronic pulmonary disease, valvular heart disease, and depression (TABLE 1). Roughly 40% of black patients and 6% of white patients were cared for at hospitals designated as minority-serving. A significantly higher proportion of black patients were Medicaid eligible. Black patients were more likely to be discharged home for CHF, but that was less likely after acute MI and pneumonia. Black patients were less likely to die between hospital discharge and 30 days of follow-up for CHF, but there was no difference in this outcome for acute MI or pneumonia.

### Characteristics of Minority and Non-Minority-Serving Hospitals

At minority-serving hospitals, on average, 37% of patients were black compared with 1.4% of patients at non-

minority-serving hospitals (TABLE 2). Minority-serving hospitals were more often large public or for-profit hospitals. Seventy percent of the minority-serving hospitals were located in the South compared with 35% of the non-minority-serving hospitals. Minority-serving hospitals were more often teaching hospitals, served a higher proportion of Medicaid patients, and had a higher Disproportionate Share Index. Minority-serving hospitals had fewer nurses per 1000 patient-days and had somewhat lower performance on HCA measures (Table 2). Length of stay was greater at minority-serving hospitals for each condition.

### Readmissions Based on Patient Race and Site of Care

Overall, when we considered our entire group of patients with acute MI, CHF, and pneumonia in a single

**Table 1.** Discharge Characteristics by Race and Diagnosis

	No. (%) of Patients <sup>a</sup>					
	Acute Myocardial Infarction		Congestive Heart Failure		Pneumonia	
	Black (n = 42 401)	White (n = 537 091)	Black (n = 149 758)	White (n = 1 197 010)	Black (n = 84 522)	White (n = 1 152 229)
Age, median (IQR), y	76 (70-83)	78 (71-84)	76 (70-83)	81 (74-86)	77 (71-84)	80 (73-86)
Female sex	24 894 (59)	263 532 (49)	91 519 (61)	662 235 (55)	48 822 (58)	631 130 (55)
Comorbidities						
Diabetes without complications	12 530 (30)	119 344 (22)	50 954 (34)	311 741 (26)	24 196 (29)	231 498 (20)
Diabetes with complications	2704 (6)	20 184 (4)	11 730 (8)	65 701 (5)	4598 (5)	36 092 (3)
Hypertension	28 044 (66)	310 656 (58)	106 340 (71)	673 720 (56)	56 488 (67)	616 288 (53)
Chronic kidney disease	13 057 (31)	96 278 (18)	57 657 (39)	331 653 (28)	19 247 (23)	146 863 (13)
Chronic pulmonary disease	8015 (19)	117 922 (22)	47 266 (32)	412 000 (34)	33 231 (39)	574 759 (50)
Valvular heart disease	472 (1)	7092 (1)	2305 (2)	25 893 (2)	3883 (5)	85 600 (7)
Peripheral vascular disease	3833 (9)	46 817 (9) <sup>b</sup>	10 977 (7)	86 583 (7) <sup>b</sup>	4585 (5)	57 456 (5)
Depression	708 (2)	17 658 (3)	3535 (2)	55 021 (5)	3061 (4)	84 405 (7)
Obesity	1672 (4)	18 928 (4)	9006 (6)	43 903 (4)	2791 (3)	24 781 (2)
Other patient characteristics						
Medicaid eligible	17 482 (41)	82 624 (16)	69 201 (46)	239 111 (20)	43 258 (51)	264 941 (23)
Discharged from MSH	17 212 (41)	32 895 (6)	65 596 (44)	72 790 (6)	34 703 (41)	61 227 (5)
Length of stay, median (IQR), d	5 (3-9)	4 (3-8)	4 (3-7)	4 (3-6)	5 (3-8)	5 (3-7)
Died between discharge and 30 d <sup>c</sup>	708 (2)	17 658 (3)	4345 (3)	60 719 (5)	4041 (5)	59 433 (5) <sup>b</sup>
Discharge destination						
Home	29 644 (70)	384 443 (72)	114 224 (76)	849 146 (71)	52 097 (62)	739 796 (64)
SNF/rehabilitation	11 328 (27)	133 955 (25)	31 822 (21)	309 656 (26)	29 902 (35)	378 902 (33)
Hospice	1066 (3)	15 159 (3)	2419 (2)	31 152 (2)	1886 (2)	26 802 (2)
Other <sup>d</sup>	334 (1)	3150 (1)	1233 (1)	6550 (1)	585 (1)	5929 (1)

Abbreviations: IQR, interquartile range; MSH, minority-serving hospital; SNF, skilled nursing facility.

<sup>a</sup>Unless otherwise indicated.

<sup>b</sup>*P* is nonsignificant. All other *P* values are less than .001. *P* values were generated using  $\chi^2$  tests for categorical variables and using Wilcoxon tests for continuous variables.

<sup>c</sup>Excludes patients who were readmitted prior to dying.

<sup>d</sup>Includes psychiatric facilities, specialty hospitals, and unknown.

## READMISSION RATES FOR OLDER US PATIENTS

**Table 2.** Hospital Characteristics by Type of Hospital

	Minority-Serving Hospitals (n = 472)	Non-Minority-Serving Hospitals (n = 4244)	P Value <sup>a</sup>
Black patients, median (IQR), %	37.3 (30.4-50.7)	1.4 (0.2-6.1)	<.001
Structural characteristics, No. (%)			
Hospital size			
Small, 0-99 beds	169 (36)	2152 (51)	<.001
Medium, 100-399 beds	216 (46)	1735 (41)	
Large, ≥400 beds	87 (18)	357 (8)	
Ownership			
For-profit	102 (22)	726 (17)	<.001
Nonprofit	221 (47)	2541 (60)	
Public	149 (32)	977 (23)	
Urban location	373 (79)	3158 (74)	.03
Region			
Northeast	46 (10)	560 (13)	<.001
Midwest	69 (15)	1325 (31)	
South	334 (71)	1486 (35)	
West	21 (4)	870 (21)	
Hospital system member	187 (40)	1835 (43)	.13
Major teaching hospital	82 (17)	203 (5)	<.001
Cardiac catheterization services	174 (37)	1486 (35)	.34
Cardiac surgical services	108 (23)	942 (22)	.65
Medical intensive care unit	270 (57)	2691 (63)	.02
<b>Patient Population and Nurse Staffing Levels, Median (IQR)</b>			
Disproportionate share index <sup>b</sup>	0.36 (0.27-0.48)	0.21 (0.14-0.29)	<.001
Medicaid patients, %	20 (15-29)	15 (9-20)	<.001
Medicare patients, %	44 (37-53)	48 (42-56)	<.001
Nurses per 1000 patient d	5.5 (4.2-7.2)	6.5 (4.7-9.0)	.28
<b>Performance on Quality and Cost Measures, Median (IQR)</b>			
HQA score			
Acute MI, 2073 hospitals reporting	95 (91-97)	96 (93-98)	<.001
CHF, 3362 hospitals reporting	87 (79-92)	88 (80-94)	.03
Pneumonia, 3655 hospitals reporting	89 (84-93)	92 (88-95)	<.001
Length of stay			
Acute MI	5 (3-8)	4 (3-8)	<.001 <sup>c</sup>
CHF	4 (3-7)	4 (3-6)	<.001 <sup>c</sup>
Pneumonia	5 (3-8)	5 (3-7)	<.001 <sup>c</sup>

Abbreviations: CHF, congestive heart failure; HQA, Hospital Quality Alliance; IQR, interquartile range; MI, myocardial infarction.

<sup>a</sup>P values were generated using  $\chi^2$  tests for categorical variables, and using Wilcoxon tests for continuous variables.<sup>b</sup>Excludes Critical Access Hospitals, for which this information is not available.<sup>c</sup>Length of stay was longer for minority-serving hospitals for all three conditions.

sample, black patients had 13% higher odds of all-cause 30-day readmission than white patients (odds ratio [OR], 1.13; 95% confidence interval [CI], 1.11-1.14;  $P < .001$ ); patients discharged from minority-serving hospitals had 23% higher odds of readmission than patients from non-minority-serving hospitals (OR, 1.23; 95% CI, 1.20-1.27;  $P < .001$ ). When we examined the conditions separately and examined patient race and site of care simultaneously, both factors were significantly associated with readmission rates. Among patients with acute MI, black patients had 13% higher odds of readmission (OR, 1.13; 95% CI, 1.10-1.16;  $P < .001$ ), irrespective of the site of care, while patients from minority-serving hospitals had 22% higher odds of readmissions (OR, 1.22; 95% CI, 1.17-1.27;  $P < .001$ ), even accounting for patient race. The results for the other 2 conditions were similar (TABLE 3). There was no significant interaction between race and site of care ( $P$  values for interaction  $> .10$ ).

### Readmissions Based on Race and Site Groups

Examining readmissions in our pre-specified groups, we found that white patients at non-minority-serving hospitals consistently had the lowest odds of readmission and that black patients at minority-serving hospitals, the highest. For example, among patients with acute MI, using white patients at non-minority-serving hospitals as the reference group, black patients at minor-

**Table 3.** Risk-Adjusted Odds of 30-Day All-Cause Readmission by Race and Site of Care<sup>a</sup>

	Acute Myocardial Infarction			Congestive Heart Failure			Pneumonia		
	No. of Patients	Readmission Rate, %	Odds Ratio (95% CI)	No. of Patients	Readmission Rate, %	Odds Ratio (95% CI)	No. of Patients	Readmission Rate, %	Odds Ratio (95% CI)
Race									
Black	42 401	24.8	1.13 (1.10-1.16)	149 758	27.9	1.04 (1.03-1.06)	84 522	23.7	1.15 (1.12-1.17)
White	537 091	22.6	1 [Reference]	1 197 010	27.1	1 [Reference]	1 152 229	21.3	1 [Reference]
Site of care									
Minority-serving hospital	50 107	25.5	1.22 (1.17-1.27)	138 386	28.8	1.14 (1.11-1.17)	95 930	24.0	1.18 (1.14-1.22)
Non-minority-serving hospital	529 385	22.0	1 [Reference]	1 208 382	26.2	1 [Reference]	1 140 821	21.1	1 [Reference]

Abbreviation: CI, confidence interval.

<sup>a</sup>Table displays risk-adjusted odds of all-cause 30-day readmission, in a single model for each condition. Odds of readmission are examined as a function of both race and site of care.  $P < .001$  for all comparisons.

ity-serving hospitals (OR, 1.35, 95% CI, 1.28-1.42), white patients at minority-serving hospitals (OR, 1.23; 95% CI, 1.18-1.29), and black patients at non-minority-serving hospitals (OR, 1.20; 95% CI, 1.16-1.23) had progressively higher odds of readmission ( $P < .001$  for each). The results for CHF and pneumonia were similar (TABLE 4). When we further adjusted these analyses for discharge destination, length of stay, and key hospital characteristics, we found comparable results. Further adjusting for markers of caring for the poor had only modest effects, with the exception of CHF, in which the disparity between black and white patients at non-minority-serving hospitals was no longer statistically significant (Table 4). Finally, adjusting for a hospital's HQA score did not affect readmission rates (data not shown).

### Same-Cause Readmissions

When we examined race, site of care, and same-cause readmissions, we found

similar results for both acute MI and CHF. Among patients with acute MI, black patients had 13% higher odds of readmission than white patients (OR, 1.13; 95% CI, 1.07-1.20), controlling for site of care, and patients discharged from minority-serving hospitals had 15% higher odds of readmission than patients discharged from non-minority-serving hospitals (OR, 1.15; 95% CI, 1.06-1.25), controlling for race. The findings were similar for CHF, but not for pneumonia, where the differences were not statistically significant (eTable 3A available at <http://www.jama.com>). Our 4-group analyses were similar as well; among patients with acute MI, using white patients at non-minority-serving hospitals as our reference group, black patients at minority-serving hospitals (OR, 1.30; 95% CI, 1.17-1.45), white patients at minority-serving hospitals (OR, 1.15; 95% CI, 1.05-1.25), and black patients at non-minority-serving hospitals (OR, 1.13; 95% CI, 1.06-1.21) all had sig-

nificantly higher odds of readmission ( $P < .001$  for each). These results were similar for CHF, but were not significant for pneumonia (eTable 3B).

### Sensitivity Analyses

In sensitivity analyses, we found that excluding Hispanics, Asian-Americans, and other nonwhite, nonblack racial or ethnic groups did not significantly change our results (eTable 4 A and B). Excluding patients who died between discharge and 30 days or considering a composite outcome of death or readmission, as well as adding prior hospitalizations and in-hospital procedures to our model, eliminated the disparities in 1 subgroup: for patients with CHF at non-minority-serving hospitals, there were no racial disparities in readmissions. However, the disparities persisted for patients with CHF at minority-serving hospitals and for patients with acute MI or pneumonia at either type of hospital (eTable 5A and B, eTable 6 A and B, and eTable 7A and B).

**Table 4.** Risk-Adjusted Odds of 30-Day All-Cause Readmission, Grouped by Race and Site of Care<sup>a</sup>

			Odds Ratio (95% Confidence Interval) <sup>b</sup>				
Patients	No. of Patients	Readmission Rate, % <sup>c</sup>	Model 1	Model 2	Model 3	Model 4	Model 5
Acute myocardial infarction							
Minority-serving hospital							
Black	17 212	26.4	1.46 (1.38-1.54)	1.35 (1.28-1.42)	1.30 (1.24-1.37)	1.28 (1.21-1.35)	1.22 (1.16-1.29)
White	32 895	24.6	1.22 (1.17-1.28)	1.23 (1.18-1.29)	1.21 (1.16-1.26)	1.18 (1.13-1.24)	1.14 (1.09-1.19)
Non-minority-serving hospital							
Black	25 189	23.3	1.25 (1.21-1.29)	1.20 (1.16-1.23)	1.12 (1.08-1.16)	1.12 (1.08-1.15)	1.11 (1.08-1.15)
White	504 196	20.9	1 [Reference]	1 [Reference]	1 [Reference]	1 [Reference]	1 [Reference]
Congestive heart failure							
Minority-serving hospital							
Black	65 596	29.0	1.20 (1.16-1.23)	1.20 (1.16-1.23)	1.18 (1.15-1.21)	1.15 (1.12-1.19)	1.10 (1.06-1.13)
White	72 790	27.8	1.11 (1.08-1.15)	1.13 (1.10-1.17)	1.12 (1.09-1.16)	1.09 (1.06-1.13)	1.05 (1.01-1.08) <sup>d</sup>
Non-minority-serving hospital							
Black	84 162	26.1	1.06 (1.04-1.08)	1.04 (1.02-1.06)	1.01 (1.00-1.04) <sup>e</sup>	1.02 (1.00-1.04) <sup>e</sup>	1.02 (1.00-1.04) <sup>e</sup>
White	1 124 220	25.3	1 [Reference]	1 [Reference]	1 [Reference]	1 [Reference]	1 [Reference]
Pneumonia							
Minority-serving hospital							
Black	34 703	25.2	1.36 (1.31-1.42)	1.35 (1.30-1.41)	1.30 (1.26-1.35)	1.28 (1.23-1.33)	1.22 (1.18-1.28)
White	61 227	22.8	1.16 (1.12-1.21)	1.18 (1.14-1.17)	1.16 (1.11-1.20)	1.13 (1.09-1.18)	1.09 (1.05-1.13)
Non-minority-serving hospital							
Black	49 819	22.8	1.19 (1.16-1.21)	1.15 (1.12-1.17)	1.12 (1.09-1.14)	1.13 (1.10-1.15)	1.12 (1.09-1.15)
White	1 091 002	20.0	1 [Reference]	1 [Reference]	1 [Reference]	1 [Reference]	1 [Reference]

<sup>a</sup>Model 1 includes age alone; model 2 includes model 1 plus patient comorbidities; model 3 includes model 2 plus discharge destination (home, nursing home or rehabilitation facility, hospice, or other) and length of stay; model 4 includes model 3 plus hospital characteristics (size, membership in a system, teaching status, ownership, location, and region); model 5 includes model 4 plus percent Medicaid at each hospital and each hospital's Disproportionate Share Index.

<sup>b</sup>Table displays risk-adjusted odds of all-cause 30-day readmission in a single model for each condition. Odds of readmission are examined as a function of both race and site of care, broken into 4 categories.

<sup>c</sup>Readmission rates are based on model 2, the fully risk-adjusted model.

<sup>d</sup> $P$  value is nonsignificant at .008.

<sup>e</sup> $P < .008$ . All other  $P$  values are  $< .001$ .



**COMMENT**

We found that elderly black Medicare patients had higher odds of 30-day readmission than white patients for acute MI, CHF, and pneumonia. These disparities were related to race itself as well as to the site where care was provided: black patients had a 13% higher odds of readmission than white patients, while patients discharged from minority-serving hospitals had a 23% higher odds of readmission than patients discharged from non-minority-serving hospitals.

Understanding why health care disparities exist is the key first step in eliminating them. Persistent racial disparities in health care utilization and outcomes are well-documented,<sup>1</sup> and Healthy People 2010, the federal government's set of published health objectives, includes the elimination of health disparities as an overarching goal.<sup>2</sup> Furthermore, reducing readmissions has become a top priority for policy makers, and to that end, the recently passed Patient Protection and Affordable Care Act (PPACA)<sup>29</sup> authorizes financial penalties for hospitals performing poorly on this measure. However, until now, we have had little information on whether there are disparities in readmission rates and why they might exist.

Despite ongoing interest in understanding disparities, much of the previous work has focused on differential outcomes between racial groups, without taking into account the systems within which care is delivered. Given that care for black patients is concentrated among a small number of hospitals,<sup>5</sup> understanding how outcomes vary as a function of where patients receive care can help policy makers target interventions. We found that the association of readmission rates with the site of care was consistently greater than the association with race, suggesting that racial disparities in readmissions are, at least in part, a systems problem—the hospital at which a patient receives care appears to be at least as important as his/her race.

It is unclear why patients discharged from hospitals that serve a high propor-

tion of black patients had higher odds of readmission. Adjusting for differences in structural characteristics such as teaching status, size, and ownership had little effect on our primary findings. Similarly, adjusting for the proportion of Medicaid patients and hospitals' Disproportionate Share Index did not explain the differences between hospitals, suggesting that either our measures of financial stress are inadequate or that the higher readmission rates among these hospitals are due to other factors, such as a failure to prioritize quality or inadequate focus on transitions of care and coordination of care. Several studies have found that interventions beginning in the hospital and focusing on transitional care can reduce readmissions,<sup>30–32</sup> but whether minority-serving hospitals engage in such programs as often or as effectively as non-minority-serving hospitals is unclear.

Factors beyond hospitals' control might explain our findings. Chronic medical illness requires close outpatient management. Early outpatient follow-up after hospitalization<sup>33</sup> as well as disease management and patient education<sup>34–36</sup> can reduce readmissions among both white and minority populations. It may be that availability of high-quality outpatient care is limited for patients discharged from minority-serving hospitals; these issues should be better understood before hospitals are held solely accountable for high readmission rates.

Others have examined the role of site of care in determining patient outcomes. For example, black patients may have worse outcomes than white patients following major surgeries,<sup>37,38</sup> but taking features of the surgeon and hospital into account explains some of those gaps.<sup>38–40</sup> For Medicare patients with acute MI, hospitals serving a high proportion of black patients have higher 90-day mortality rates,<sup>41</sup> and for pneumonia, these hospitals are less likely to provide timely antibiotics.<sup>42</sup> Others have found that racial disparities in the quality of medical care, as measured by HCA metrics, may be due, in part, to where minorities and whites receive care.<sup>43,44</sup>

We are unaware of prior work that has focused on readmissions and site of care. Given that reducing readmissions has the potential to both improve quality and decrease costs, this measure has gained support as an important component of tracking hospital performance. It is critical to understand how recently enacted policies, especially those that penalize hospitals with high readmission rates, might impact disparities in care. Our findings suggest that minority-serving hospitals might be disproportionately affected by such penalties.

Our study has limitations. Because we used administrative data, our risk adjustment may have been limited in its ability to account for variations in severity of illness across racial groups and across hospitals. We lacked data on the specific medications and nonprocedural treatments that patients received during their hospitalization and were unable to assess if these were different between black and white patients. Because we lacked data on transitions of care and outpatient care, we could not assess whether our findings were due to inadequacies in these areas. Our sample was limited to Medicare patients; although these patients make up the majority of admissions for CHF, acute MI, and pneumonia,<sup>45,46</sup> whether our findings apply to readmissions for younger patients is unclear. Finally, we could not assess whether the relationships we found were causal or rather simply markers of other unmeasured factors that may influence readmission rates.

**CONCLUSIONS**

We found that older black Medicare patients in the United States had higher 30-day readmission rates than white patients for 3 common medical conditions and that these differences were related, in part, to higher readmission rates among hospitals that disproportionately care for black patients. These associations persisted even after accounting for a series of potential confounders including markers of caring for poor patients, suggesting that mea-

sured features of hospitals and lower reimbursements alone are unlikely to explain these gaps. Our findings that racial disparities in readmissions are related to both patient race and the site where care is provided should spur clinical leaders and policy makers to find new ways to reduce disparities in this important health outcome.

**Author Contributions:** Dr Joynt had full access to all of the data in the study and takes responsibility for the integrity of the data and the accuracy of the data analysis. *Study concept and design:* Joynt, Jha.

*Acquisition of data:* Jha.

*Analysis and interpretation of data:* Joynt, Orav, Jha. *Drafting of the manuscript:* Joynt.

*Critical revision of the manuscript for important intellectual content:* Joynt, Orav, Jha.

*Statistical analysis:* Joynt, Orav.

*Administrative, technical, or material support:* Jha. *Study supervision:* Jha.

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**Online-Only Material:** The eAppendix and eTables 1 through 7 are available at <http://www.jama.com>.

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U.S. Department of Health and Human Services  
Office of the Secretary

PROGRESS REPORT TO CONGRESS

HHS Office of Minority Health

2020 Update on the Action Plan to  
Reduce Racial and Ethnic Health Disparities

FY 2020



## Acronyms

AIM	Alliance for Innovation on Maternal Health
ARHQ	Agency for Healthcare Research and Quality
CDC	Centers for Disease Control and Prevention
CHIP	Children's Health Insurance Program
CLAS	Culturally and Linguistically Appropriate Services
CMS	Centers for Medicare & Medicaid Services
FDA	Food and Drug Administration
FQHC	Federally Qualified Health Center
HRSA	Health Resources and Services Administration
HHS	U.S. Department of Health and Human Services
IHS	Indian Health Service
MMRC	Maternal Mortality Review Committee
NIH	National Institutes of Health
OCR	Office for Civil Rights
OMH	HHS Office of Minority Health
RHC	Rural Health Clinic
SAMHSA	Substance Abuse and Mental Health Services Administration

## Summary

Included in the Manager's Agreement to H.R. 1865, which became Public Law 116-94, the Further Consolidated Appropriations Act, 2020, was a request for an update of the Action Plan to Reduce Racial and Ethnic Health Disparities (page 119):

*Within 180 days of enactment of this Act, HHS shall submit to the Committees an update of the Action Plan to Reduce Racial and Ethnic Health Disparities. The update should include barriers to full implementation and proposed remedies. The report should include the extent that HHS programs collect, report, and analyze health disparities data based on race, ethnicity, disability, and other characteristics for the population HHS programs serve. The updated report shall include specific efforts to improve birth outcomes for African-American women and children, including how to address implicit bias in healthcare delivery and the health impacts of trauma associated with racism. (Page 119, Managers Agreement)*

The following report is an update on the HHS Action Plan to Reduce Racial and Ethnic Health Disparities.



# PROGRESS REPORT

## Overview

In 2011, the U.S. Department of Health and Human Services (HHS) published the [Action Plan to Reduce Racial and Ethnic Health Disparities, \(Disparities Action Plan\)](#) to strategically align HHS efforts to reduce and eliminate disparities in health and health care. The five primary goals of the Action Plan are listed below.

- I. Transform Health Care**
- II. Strengthen the Nation's Health and Human Services Infrastructure and Workforce**
- III. Advance the Health, Safety and Well-Being of the American People**
- IV. Advance Scientific Knowledge and Innovation**
- V. Increase the Efficiency, Transparency and Accountability of HHS Programs**

The Disparities Action Plan featured select HHS programs and milestones to reinforce an integrated, data-driven approach for addressing health disparities and improving the access, use and outcomes of HHS initiatives. In 2015, HHS provided a [progress report](#) on the Disparities Action Plan to provide illustrative examples of important work to reduce health disparities.

The goals for the Disparities Action Plan continue to be relevant as HHS increases the impact of policies and programs to reduce health disparities in the context of emerging policies and conditions. This progress report highlights the implementation of the Disparities Action Plan elements in FY 2019 and FY 2020, with particular attention to the following three HHS priority areas.

- A. The Opioid Crisis**
- B. Maternal and Infant Health**
- C. COVID-19 Response and Recovery**

### **A. The Opioid Crisis**

The opioid crisis is a nationwide public health challenge, and opioid misuse and opioid overdose mortality continues to affect racial and ethnic minority populations. Data from the Substance Abuse and Mental Health Services Administration (SAMHSA) shows that non-Hispanic Native Hawaiians and other Pacific Islanders have the highest rates of opioid misuse among those aged 18 and over.<sup>1</sup> According to the Centers for Disease Control and Prevention (CDC), from 2017 to 2018, small decreases occurred in all overdose deaths and

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<sup>1</sup> SAMHSA Center for Behavioral Health Statistics and Quality. (2019). 2018 National Survey on Drug Use and Health: Detailed Tables. Substance Abuse and Mental Health Services Administration, Rockville, MD. Table 1.60B, accessed from: <https://www.samhsa.gov/data/nsduh/reports-detailed-tables-2018-NSDUH>

in deaths involving all opioids, prescription opioids, and heroin. However, deaths involving synthetic opioids continued to increase in 2018 and accounted for two-thirds of opioid-involved deaths. Data show that from 2017 to 2018, Hispanics experienced the largest relative increases (27%) in synthetic opioid-involved overdose deaths compared to other racial/ethnic groups.<sup>2</sup> Non-Hispanic Asians/Pacific Islanders experienced the second largest increase (25%).<sup>3</sup> Non-Hispanic Whites experienced the lowest relative increase (5.9%).<sup>4</sup> Despite growing opioid misuse and overdose mortality issues, treatment utilization remains lower among racial and ethnic minority populations. The CDC also noted that increases in deaths among racial and ethnic minorities indicates the need for culturally tailored interventions that address social determinants of health and structural-level factors.

## **B. Maternal and Infant Health**

According to the CDC, the maternal mortality [rate](#) in the United States for 2018 was 17.4 maternal deaths per 100,000 live births. CDC [data](#) show that racial/ethnic disparities in pregnancy-related mortality<sup>5</sup> and severe maternal morbidity are striking. During 2011-2016, the pregnancy-related mortality<sup>6</sup> ratios were:

- 42.4 deaths per 100,000 live births for non-Hispanic Black women.
- 30.4 deaths per 100,000 live births for non-Hispanic American Indian/Alaska Native (AI/AN) women.
- 14.1 deaths per 100,000 live births for non-Hispanic Asian/Pacific Islander women.
- 13.0 deaths per 100,000 live births for non-Hispanic white women.
- 11.3 deaths per 100,000 live births for Hispanic women.

Severe maternal morbidity<sup>7</sup> rates are higher among racial and ethnic minority women compared to non-Hispanic white women. In 2017, the rate of severe maternal morbidity was 93% higher among Black/African American women when compared to white women.<sup>8</sup> This variability in

<sup>2</sup> <https://www.cdc.gov/mmwr/volumes/69/wr/mm6911a4.htm>

<sup>3</sup> <https://www.cdc.gov/mmwr/volumes/69/wr/mm6911a4.htm>

<sup>4</sup> <https://www.cdc.gov/mmwr/volumes/69/wr/mm6911a4.htm>

<sup>5</sup> According to the CDC, Maternal Mortality is defined as “the death of a woman while pregnant or within 42 days of termination of pregnancy,” but excludes those from accidental/incidental causes. Source:

[https://www.cdc.gov/nchs/pressroom/nchs\\_press\\_releases/2020/202001\\_MMR.htm](https://www.cdc.gov/nchs/pressroom/nchs_press_releases/2020/202001_MMR.htm)

<sup>6</sup> According to the CDC, a Pregnancy Related Death is defined as “A pregnancy-related death is defined as the death of a woman while pregnant or within 1 year of the end of a pregnancy –regardless of the outcome, duration or site of the pregnancy—from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes.” Source: <https://www.cdc.gov/reproductivehealth/maternal-mortality/pregnancy-mortality-surveillance-system.htm#how>

<sup>7</sup> Severe Maternal Morbidity includes unexpected outcomes of labor and delivery that result in significant short- or long-term consequences to a woman's health. SOURCE:

[https://www.cdc.gov/reproductivehealth/maternalinfanthealth/severematernalmorbidity.html#anchor\\_how](https://www.cdc.gov/reproductivehealth/maternalinfanthealth/severematernalmorbidity.html#anchor_how)

<sup>8</sup> Agency for Healthcare Research and Quality, Healthcare Cost and Utilization Project (HCUP), State Inpatient Databases (SID), 41 States and the District of Columbia, 2017 (from all states with reliable race reporting data in 2017 except Minnesota, Montana, North Dakota, Nebraska, Utah, and West Virginia) [www.hcup-](http://www.hcup-)

the risk of severe complications of pregnancy and pregnancy related deaths by race/ethnicity indicates that more can be done to understand and reduce pregnancy-related deaths.

In the last two years, HHS has given added priority to improving maternal health outcomes in the United States. In 2019, HHS established a department-wide workgroup to coordinate and enhance the Department's work in this area, including addressing racial and ethnic disparities in maternal mortality and severe morbidity.

### **C. COVID-19 Response and Recovery**

Data suggests that racial and ethnic minority populations bear a disproportionate burden of illness and death from COVID-19. As of August 18, 2020, Black/African American individuals accounted for 19.8% of confirmed cases (with known race/ethnicity) despite making up 13.4% of the U.S. population. Hispanic individuals accounted for 31.1% of confirmed cases but represent 18.5% of the U.S. population.<sup>9, 10</sup> Data from some states and localities have suggested higher rates of deaths for racial and ethnic minority individuals than for white individuals. Among AI/AN populations, the Navajo Nation (located in Arizona, Utah and New Mexico) and the White Mountain Apache Tribe (located in Arizona) has been particularly affected. The Navajo Nation individuals accounted for over four times more deaths compared to the state of Arizona's COVID-19 death rate (267 vs. 63 per 100,000 population).<sup>11, 12</sup> The White Mountain Apache Tribe individuals accounted for close to four times more deaths compared to the state of Arizona's COVID-19 death rate (245 vs. 63 per 100,000 population).<sup>6, 13</sup> Racial and ethnic minorities are at greater risk for exposure to and adverse outcomes from COVID-19 due to social determinants of health and living and working conditions. A greater prevalence of underlying health conditions also put racial and ethnic minorities at higher risk for severe illness and death from COVID-19. Persistent disparities in access to healthcare pose challenges for racial and ethnic minority populations receiving COVID-19 services.

The following are examples of HHS's implementation of the five HHS Disparities Action Plan elements in these three priority areas.

## **Action Plan Implementation Updates**

### **I. Transform Health Care**

Transforming health care includes expanding access to culturally and linguistically appropriate health care services.

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[us.ahrq.gov/sidoverview.jsp](https://us.ahrq.gov/sidoverview.jsp)

<sup>9</sup> <https://www.cdc.gov/covid-data-tracker/index.html#demographics>

<sup>10</sup> <https://www.census.gov/quickfacts/fact/table/US/PST045219>

<sup>11</sup> <https://us-covid19-per-capita.net/deaths.htm>

<sup>12</sup> <https://www.ndoh.navajo-nsn.gov/COVID-19>

<sup>13</sup> <https://www.facebook.com/White-Mountain-Apache-Tribe-Emergency-Operations-Center-103417867996160>

**A. The Opioid Crisis**

- Expanding Treatment and Recovery Services for Diverse Populations: In FY 2019 and 2020, the SAMHSA Office of Behavioral Health Equity and Justice Involved (OBHE) funded the National Network to Eliminate Disparities in Behavioral Health (NNED) to support the expansion of treatment and recovery services for diverse populations affected by the opioid crisis through training in evidence-based prevention strategies, convening expert panels on effective clinical engagement strategies and disseminating informational resources on mental health and substance use issues.
- Strengthening Access to Treatments for Substance Use Disorders and Serious Mental Illnesses: Ensuring consistent and ongoing treatment for substance use disorders and serious mental illness is important, particularly as the COVID-19 pandemic has added significant new stressors that may be felt more acutely by the physically and financially vulnerable. SAMHSA released \$110 million to state, local, and tribal governments to continue to expand access to appropriate treatments for preexisting mental health conditions or for challenges arising during the COVID-19 pandemic.

**B. Maternal and Infant Health**

- Supporting Maternal and Infant Healthcare Coverage and Accountability: The Centers for Medicare & Medicaid Services (CMS) administer both Medicaid and the Children's Health Insurance Program (CHIP). These programs cover health services for women and children in families that meet certain income eligibility criteria. Medicaid plays a key role in providing maternity-related services for pregnant women, paying for slightly less than half (43%) of all births nationally in 2018. States can also provide CHIP-financed services for pregnant women. Because 21.4% and 38.7% of Medicaid or CHIP enrollees aged 0-18 and 21.5% and 24.7% of Medicaid or CHIP enrollees aged 19-64 are Black/African American and Hispanic, respectively, Medicaid and CHIP programs are well placed to address racial disparities in maternal and infant health. Medicaid covered a greater share of births in rural areas and among minority women.

CMS produces the Medicaid and CHIP Scorecard, an effort to increase public transparency and accountability for outcomes, including prenatal and postpartum care. CMS recently updated the Scorecard, which includes a maternal health measure on postpartum care with results presented by state. In addition, to support CMS's maternal and perinatal health-focused efforts, CMS identified a core set of 11 measures for voluntary reporting by state Medicaid and CHIP agencies. This Core Set, which consists of seven measures from CMS's Child Core Set and four measures from the Adult Core Set, will be used by CMS to measure and evaluate progress toward improvement of maternal and perinatal health in Medicaid and CHIP.

- Expanding Maternal Safety and Quality Improvement Efforts: The Alliance for Innovation on Maternal Health (AIM Program) is a national data-driven maternal safety and quality improvement initiative that strives to equip every state, Perinatal Quality Collaborative



(PQC), hospital, birth facility, and maternity care provider with the ability to significantly reduce severe maternal morbidity and maternal mortality in the U.S. AIM is part of the central effort of the Health Resources and Services Administration (HRSA) Maternal and Child Health Bureau to prevent maternal mortality and severe maternal morbidity in the clinical setting. Through AIM, HRSA partners with community, state and national organizations to implement maternal safety bundles in birthing facilities throughout the states. HRSA awarded the first AIM implementation funding to the American College of Obstetricians and Gynecologists in 2014 and works closely with CDC's funded PQCs and the National Network of PQCs to develop and disseminate AIM bundles. As of April 2020, 33 states are enrolled in AIM and approximately 1,400 hospitals are participating in the implementation of maternal safety bundles. Of the bundles that partners may chose, one specifically addresses racial/ethnic health disparities. In FY 2020, HRSA is working to reach all 50 states, D.C., U.S. territories, and tribal communities. HRSA is now supporting the development and implementation of maternal safety bundles to address preventable maternal mortality and severe maternal morbidity outside of hospital and other birthing facility settings.

### C. COVID-19 Response and Recovery

#### **Making Testing More Accessible and Affordable**

- [Expanding Testing at Federally Qualified Health Centers \(FQHCs\)](#): \$583 million was awarded to 1,385 HRSA-funded health centers, which are located in underserved communities and are often the main source of affordable and accessible healthcare, to expand COVID-19 testing. Over 22% of people served by health centers are Black/African American. [A large majority \(96%\) of FQHCshealth centers are testing for COVID-19](#); these funds will support and expand that effort. In addition to the ongoing mandatory health center program funding, the Administration has invested a total of \$2 billion in community health centers to respond to COVID-19, ensuring that 28 million people living in medically underserved areas have access to the care and testing they need.
- [Getting Testing at Community-Based Retail Testing Sites](#): HHS supports a public-private partnership that established COVID-19 testing locations in certain CVS, Rite Aid, Walgreens, Walmart, Kroger, and Health Mart stores to accelerate testing for more Americans in communities across the country. The partnership continues to provide Americans with faster, less invasive and more convenient testing; protect healthcare personnel by eliminating direct contact with symptomatic individuals; and expand rapidly to areas that are under-tested and socially vulnerable.<sup>14</sup> Approximately 70% of these sites are located in areas with high social vulnerability, as identified using the CDC Social Vulnerability Index.

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<sup>14</sup> Socially vulnerable groups refers to individuals, communities or populations that have characteristics that affect their capacity to anticipate, confront, repair, and recover from the effects of a disaster.

- Retail and Pharmacy Expansion: The pharmacy and retail partnership provides convenient access to COVID-19 testing, but it is also a bridge for retailers to implement new regulatory flexibilities and expanded reimbursement options HHS has provided through private insurance, Medicare, Medicaid, and the newly expanded authority given to pharmacists to order and administer COVID-19 testing. There are currently over 1960 sites (CVS and Walmart) that have taken advantage of these flexibilities.
  - State governments are developing partnerships with retail and pharmacy providers utilizing the best practices of the federal program and the new reimbursement mechanisms made possible by the federal government.
- Surge Testing: Surge testing efforts temporarily increase federal support to communities where there has been a recent and intense level of new cases and hospitalizations related to the ongoing outbreak. These sites will conduct up to 5,000 tests a day for a period of seven to 12 days with the intent to detect cases that would go undetected and could, in those middle size metropolitan areas, further help the states to flatten the curve.
  - Surge testing sites have been established in 8 states to date. To date over 208,000 tests have been conducted at these sites with positivity rates ranging from 6 to 15%.
  - Live sites - Surge testing is ongoing Birmingham, AL, Honolulu, HI, Baton Rouge/New Orleans, LA, Bakersfield, CA, Harris County/Houston, TX, Atlanta, GA, and Cococino Counties, AZ.
  - Closed sites - Surge testing has been completed in Edinburg, TX, Jacksonville, FL, Miami, FL, and Pima County/Yuma County/Phoenix, AZ.
  - 12% of individuals obtaining testing at the surge testing sites identified their ethnicity as Hispanic/Latino. 6.8% identified their race as Native Hawaiian or Other Pacific Islander and 5.2% identified their race as Black or African American.
  - There are three elements to the surge testing site operations: federal government support, federal contractor support, and state and local jurisdiction support.
  - The federal government provides personal protective equipment (surgical masks and gloves, cloth face coverings (five per person getting tested)), and community mitigation guidance (via CDC).
  - The federal contractor provides online registration, medical personnel (if requested by local jurisdiction), test kits (swabs, transport media, specimen bags), shipping containers, biohazard labels and mailing labels for shipping, the ordering physician for labs, specimen processing (turnaround time of 3-5 days), notification via email for individuals to log on to the contractor's portal to obtain results, and notification of lab results to the state and local health departments.
  - The state and local governments provide non-medical personnel, biohazard waste management, management of sites, storage of specimens (if operations extend after courier service arrives for daily pick-up), security/law enforcement/traffic control, durable non-medical equipment, such as tents, cones, tables, chairs,

sharpie markers, computers/iPads and Wi-Fi for onsite registration, blank vouchers or printers to print vouchers on site, printed educational and information materials, advertising and media relations.

- **Point of Care Testing:** HHS worked with eTrueNorth on a point-of-care testing pilot project in Broward County. The pilot provided rapid point-of-care tests from mobile units to high-risk communities in Broward County. The intent of the program is to go where people at high-risk for COVID-19 reside and test 2,000 (200 individuals per day) people and provide them with their results immediately using the Abbott ID Now rapid point-of-care testing platforms. Test results were provided to the individual within 15 minutes or less. The pilot was staffed by both local emergency management and public health staff and eTrueNorth medical personnel. This project ran for ten days from Thursday, August 13 through Saturday, August 22. 1617 individuals were tested. 54.7% of individuals tested at these sites identified their ethnicity as Hispanic/Latino and 21.5% of individuals tested identified their Race as Black or African American, <1% identified their race as Asian, and <1% identified their race as Native Hawaiian or Other Pacific Islander.
- **Helping States Protect Vulnerable Populations:** As of August 2020 CDC has awarded over \$872 million from the Coronavirus Preparedness and Response Supplemental Appropriations Act and then another \$631 million from the Coronavirus Aid, Relief, and Economic Security (CARES) Act to state and local jurisdictions to support contact tracing, surveillance and testing, all of which are fundamental to protecting vulnerable populations, particularly as communities take steps to reopen. CDC has awarded \$10.25 billion to states to increase testing in 64 state and local jurisdictions from the Paycheck Protection Program and Health Care Enhancement Act. In addition, CDC has awarded over \$206.4 million to tribal nations, consortia, and organizations for responding to COVID-19 across tribal communities.<sup>15</sup>

### **Making Treatment More Accessible and Affordable**

- **Paying for Care of Uninsured Individuals:** HHS is using a portion of the Provider Relief Fund to pay for COVID-19-related care of uninsured Americans and using other funds provided to reimburse providers for conducting COVID-19 testing for the uninsured. Doctors, hospitals and other providers who have provided testing or treatment for uninsured individuals with a COVID-19 diagnosis on or after February 4, 2020 can request claims reimbursement through the program and will be reimbursed generally at Medicare rates, subject to available funding.
- **Protecting Patients from Debt Collectors:** HHS also is protecting uninsured individuals coping with COVID-19 by requiring that the provider accept Provider Relief Fund payments for COVID-19 testing or treatment of an uninsured individual as payment in full. This guarantees that the uninsured will not have hospitals or other healthcare providers who receive funds from the Provider Relief Fund trying to collect for the care provided to support COVID-19 treatment and recovery.

<sup>15</sup> <https://www.cdc.gov/coronavirus/2019-ncov/downloads/php/funding-update.pdf>

- Supporting Hospitals that Serve Low-Income Communities: As elective procedures were canceled, the continued financial viability of some hospitals has been threatened, specifically those that were already operating on thin margins because they serve rural populations or care for a disproportionately high number of Medicaid, Medicare, and uninsured patients. The [Federal Office of Rural Health Policy in HRSA received \\$150 million to assist hospitals](#) funded through the Small Rural Hospital Improvement Program to support capacity building in small hospitals to help them provide services to fight COVID-19. Because of the importance of these rural communities, [HHS further allocated](#) over \$11 billion from the Provider Relief Fund to support rural providers. HHS also targeted an additional \$2 billion from the Provider Relief Fund to hospitals based on their Medicare and Medicaid disproportionate share and uncompensated care payments and who provided care for 100 or more COVID-19 patients through April 10, 2020.

### **Expanding Telehealth Options to Ensure Access to Needed Care**

- Expanding Access to Telehealth Services: Vulnerable populations can face any number of challenges accessing healthcare, including transportation and time. Telehealth helps provide necessary healthcare while minimizing transmission risk of COVID-19 to patients and healthcare personnel. The federal government, particularly CMS, has taken steps to make accessing care while at home or work through telehealth easier during the COVID-19 pandemic. CMS is helping people enrolled in Medicare to receive medical care using telecommunications technology (e.g., synchronous discussion over a telephone or exchange of information through video or image). CMS also announced a waiver allowing a range of providers such as doctors, nurse practitioners, clinical psychologists, and licensed clinical social workers to provide telehealth and other services using communications technology wherever the patient is located, including at home and outside of designated rural areas, even across state lines. The types of telehealth that can be offered can also be flexible. Typically, devices must be equipped with audio and video capability to provide telehealth services. Now, during the public health emergency, some audio-only encounters can be reimbursed as telehealth visits. Further, IHS expanded telehealth services across IHS federal facilities.
- Expanding Rural Health Clinic (RHC) and FQHC Flexibilities: RHCs and FQHCs are essential parts of the healthcare system, particularly as it relates to underserved communities and the uninsured. To expand upon flexibilities to increase access to care, CMS released information for RHCs and FQHCs on Telehealth and Virtual Communications Flexibilities during COVID-19. Using telehealth protects at-risk patients from potential exposure to COVID-19, allows for the provision of healthcare to manage both chronic and acute health issues, and also helps those who may have transportation challenges in getting to their provider.
- Expanding Funding for Telehealth Programs: A key strategy for increasing access to care for both routine medical needs and treatment for COVID-related symptoms is through telehealth. HHS, through HRSA, has awarded money through several different programs to expand



telehealth availability. First, HRSA [awarded \\$11.5 million](#) through Telehealth Resource Centers. HRSA also [awarded \\$20 million](#) to increase telehealth access and infrastructure for providers and families to help prevent and respond to COVID-19.

- Increasing Access to Telehealth for Medicaid Substance Use Disorder Services: On April 2, 2020, CMS released an [Informational Bulletin](#) to states that identifies opportunities for telehealth delivery methods to increase access to Medicaid services for substance use disorder.

## **II. Strengthen the Nation's Health and Human Services Infrastructure and Workforce**

Strengthening the nation's health and human services workforce includes incorporating cultural and linguistic knowledge in the health care and social services delivery system.

### **A. The Opioid Crisis**

- Improving Cultural and Linguistic Competence Among Behavioral Health Providers: In FY 2019 and FY 2020, HHS created the e-learning program, *Improving Cultural Competency for Behavioral Health Professionals*. The free and accredited e-learning program is available via the HHS Office of Minority Health (OMH) [Think Cultural Health](#) website and helps to develop behavioral health providers' knowledge and skills related to culturally and linguistically appropriate services. The program was designed for certified counselors, nurses, psychiatrists, psychologists and social workers and is valuable for professionals working to address the opioid epidemic among racial and ethnic minority populations, which have low treatment rates and some of the highest rates of opioid misuse and overdose. In FY 2019 and FY 2020, more than 13,000 professionals completed at least one course in the program and 7,700 completed the entire program.

### **B. Maternal and Infant Health**

- Improving Maternal Healthcare Quality Through Provider Cultural Competency Training: The OMH Think Cultural Health website offers free, accredited continuing education e-learning programs to provide training for health professionals and organizations in delivering culturally and linguistically appropriate care, which can be applied daily to better serve their clients. OMH expects completion of a maternal health program by FY 2021. The maternal health program focuses on culturally and linguistically appropriate care as a strategy for improving care quality and addressing disparities, to which factors like implicit bias, racism or discrimination may contribute. The curriculum includes content on implicit bias, trauma and patient-centered care. Current e-learning programs are tailored for disaster and emergency management personnel, nurses, oral health professionals, physicians, and behavioral health providers. In FY 2019 and FY 2020, more than 123,000 health professionals and students enrolled in the courses, earning an estimated 532,287 continuing education credits toward their licensure renewal requirements.

### **C. COVID-19 Response and Recovery**

### **Tailored Guidance for Individuals & Communities At Increased Risk**

- Strengthening the Infrastructure for Disseminating Culturally and Linguistically Diverse Public Health Information:** In 2020, HHS launched the [National Infrastructure for Mitigating the Impact of COVID-19 within Racial and Ethnic Minority Communities Initiative](#). The \$40 million initiative will help OMH establish a network of national, state, territorial, tribal and local public and community-based organizations. This network will deliver vital culturally and linguistically diverse information on COVID-19 testing and vaccination, and other healthcare and social services to racial and ethnic minority, rural and socially vulnerable communities, including those hardest hit by the pandemic. In addition, the award will support linkages to COVID-19 testing, vaccination, other healthcare services and social services in communities highly impacted by or at greater risk for COVID-19. The network will be active in all states and territories, and the initiative will be enhanced by a multi-media campaign in the geographic areas highly-impacted by COVID-19 and with a heightened risk for adverse outcomes.
- CDC COVID-19 Health Equity Strategy:** CDC is implementing four strategic priorities to reduce the disproportionate burden of COVID-19 among populations at increased risk for infection, severe illness, and death. These strategies aim to broadly address health disparities and inequities related to COVID-19 with a holistic, all-of-response approach. To reach populations that have been put at increased risk, Priority Strategy 2 seeks to expand programs and practices for testing, contact tracing, isolation, healthcare, and recovery from the impact of unintended, negative consequences of mitigation strategies. This will be accomplished, in part, by building community capacity to reach disproportionately impacted populations with effective culturally and linguistically tailored programs and practices in place-based settings.
- Offering Guidance for People at Increased Risk:** Through data collected by doctors and epidemiologists across the country, we know that people with underlying health conditions, as well as older adults and others, are at elevated risk for complications from COVID-19. CDC has published information for people who need to take extra precautions. Conditions like diabetes, hypertension, cancer, and other chronic health conditions that are prevalent at higher rates in some minority communities can [elevate the risk for complications due to COVID-19](#). The published information offers guidance on how those at highest risk can protect themselves. It also offers important information about reducing the risk of severe illness from COVID-19 infection.
- Advancing Diversity in Clinical Trials:** During the COVID-19 pandemic, the Food and Drug Administration (FDA) Office of Minority Health and Health Equity (OMHHE) continues to support efforts to advance racial and ethnic minority representation in clinical trials. FDA OMHHE has increased amplification of clinical trial diversity messages, and provided tailored FDA COVID-19 communications to members of racial and ethnic minority groups. They also held a listening session with diverse stakeholders to learn more about the gaps and needs of racial and ethnic minority communities and to share information on FDA's COVID-

19 activities. FDA OMHHE has increased outreach by disseminating COVID-19 health education materials for consumers in multiple languages. The agency's official COVID-19 webpage has been translated into Spanish and includes a page for FDA's COVID-19 Frequently Asked Questions (available in English and Spanish). FDA has also created a COVID-19 Multilingual Resources webpage that features a growing collection of educational materials in Spanish, Simplified Chinese, Korean, Vietnamese, Tagalog, among other languages. To further enhance outreach and dissemination, FDA launched a COVID-19 Bilingual (English/Spanish) Social Media Toolkit that features consumer friendly messages and culturally appropriate graphics.

- [Enforcing Civil Rights Laws During the COVID-19 National Public Health Emergency](#): In March 2020, the HHS Office for Civil Rights (OCR) issued a bulletin to ensure that entities covered by civil rights authorities, including Section 1557 of the Affordable Care Act, are aware that their obligations under laws and regulations that prohibit discrimination on the basis of race, color, national origin, disability, age, sex, religion and exercise of conscience in HHS funded programs are not suspended in the provision of health care services during COVID-19.
- [Ensuring Access to Language Assistance Services During the COVID-19 National Public Health Emergency](#): In May 2020, OCR issued a bulletin to covered health entities to ensure they continue to serve individuals with limited English proficiency (LEP) during the COVID-19 emergency. Under regulations implementing Title VI of the Civil Rights Act of 1964 and Section 1557 of the Affordable Care Act, recipients, including hospitals and other health care providers, must take reasonable steps to provide meaningful access to individuals with LEP in their health programs and activities. The requirement to take reasonable steps to provide meaningful access to LEP persons is enforced by OCR through the procedures identified in the Title VI implementing regulations. These procedures include complaint investigations, compliance reviews, efforts to secure voluntary compliance, and technical assistance. Individuals or organizations may file a complaint via the [OCR Complaint Portal](#), for which language assistance is provided.
- [Connecting Community-Based Organizations Through the National Network to Eliminate Disparities \(NNED\) in Behavioral Health](#): SAMHSA continues to operate the NNED, which is a network of over 1,100 community-based organizations across the country serving primarily underserved racial and ethnic minority populations. The NNED provides training and informational resources, and during the COVID pandemic has accelerated informational materials, including information on CARES Act provisions, to these communities. It has hosted virtual webinars and roundtables focusing on strategies to address mental health and substance use issues exacerbated by the pandemic in minority communities.

### **III. Advance the Health, Safety and Well-Being of The American People**

Advancing health, safety and well-being includes promoting public health measures that support health.

**A. The Opioid Crisis**

- Addressing Opioid-Related Disparities in Disproportionately Impacted Communities: In 2019 and 2020, OMH continued to fund 12 projects focused on communities disproportionately impacted by the opioid crisis through the Empowered Communities for a Healthier Nation Initiative. The Initiative aims to reduce significant health disparities impacting racial and ethnic minorities and/or disadvantaged populations through demonstrating the effectiveness of implementing evidence-based strategies. Project activities included community-level strategies to prevent opioid abuse and increase access to treatment and recovery services and overdose reversal capacity, such as training and education of providers, pharmacists, and the public about opioid overdose prevention and reversal using naloxone; training of primary care providers in screening and diagnosis of opioid misuse and engagement in treatment, including MAT; supporting partnerships across multiple sectors; and reaching people who inject drugs and addressing infectious disease transmission.

**B. Maternal and Infant Health**

- Serving Pregnant and Postpartum Women with Opioid Use Disorder (OUD): In April 2019, the CMS Innovation Center announced the Maternal Opioid Misuse model. It is designed to address fragmentation in the care of participating pregnant and postpartum Medicaid and CHIP beneficiaries with OUD through state-driven transformation of the delivery system surrounding this vulnerable population. The primary goals of the model are to: (1) improve quality of care for pregnant and postpartum women with OUD as well as their infants; (2) expand access service delivery capacity and infrastructure based on state-specific needs; and (3) create sustainable coverage and payment strategies that support ongoing coordination and integration of care and reduce costs. The model requires that women with OUD receive a comprehensive set of services such as maternity care, medication-assisted treatment, and mental health screening and treatment delivered in a coordinated and integrated approach by a team of health care professionals who work in different specialties.
- Addressing Behavioral Health Issues Among Pregnant and Postpartum Women: HRSA's Screening and Treatment for Maternal Depression and Related Behavioral Disorders program, authorized by the 21st Century Cures Act, supports states to integrate behavioral health in primary care through programs that expand health care providers' capacity to screen, assess, treat, and refer pregnant and postpartum women for maternal depression and related behavioral disorders, such as anxiety and substance use disorder, especially in rural and medically underserved areas. Specifically, the program helps offer real-time psychiatric consultation, care coordination support, and training to front-line providers to improve the mental health of pregnant and postpartum women and, thereby, their infants' social and emotional development.
- Improving Access to Fetal Alcohol Spectrum Disorder (FASD) Screening and Treatment: HRSA announced in April 2020 a new funding opportunity for up to \$1 million per year for



up to three years to implement the Supporting Fetal Alcohol Spectrum Disorders Screening and Intervention program. The program is intended to reduce alcohol use among pregnant women, and to improve developmental outcomes for children and adolescents with a suspected or diagnosed FASD in parts of the country that have high rates of binge drinking among pregnant women. The specific goals of the program are to improve the ability of primary care providers (1) serving pregnant women to screen their patient population for alcohol use, provide brief intervention, and refer high-risk pregnant women to specialty care and (2) serving children and adolescents to screen their patient population for prenatal alcohol exposure among those suspected of FASD, and manage and provide referrals to necessary services.

### **C. COVID-19 Response and Recovery**

- Sharing Critical Public Health Information: In FY 2019 and 2020, HHS has supported the national response to the COVID-19 pandemic by amplifying vital information and CDC-recommended public health measures to help slow the spread of the disease. The CDC has also published the [Health Equity Considerations and Racial & Ethnic Minority Groups](#) COVID-19. OMH helped to amplify CDC resources in four languages (Spanish, Chinese, Vietnamese and Korean) by making links to the resources available on its homepage and promoting the materials via its communications platforms, including its newsletters. OMH also provided translation of COVID-19 materials into the Pacific Island languages of Tongan and Chuukese.

## **IV. Advance Scientific Knowledge and Innovation**

Advancing scientific knowledge and innovation includes the collection of race and ethnicity data.

### **A. The Opioid Crisis**

- Collecting and Reporting Opioid-Related Data by Race and Ethnicity: In FY 2019 and 2020, HHS sponsored a number national-level surveys and data collection systems to monitor the opioid epidemic and track the health of populations across a range of demographic characteristics, including racial and ethnic minorities. The Agency for Healthcare Research and Quality (AHRQ), CDC and CMS provide online data portals to allow interactive access to their data, including [dashboards on drug poisoning mortality](#) (CDC), [opioid-related hospital use data](#) (AHRQ), and [Medicare Part D opioids prescriptions](#) (CMS). CDC provides a data portal, [WONDER](#), for epidemiologic research with a wide array of public health information, including detailed mortality, compressed mortality, multiple cause of death, and infant deaths. SAMHSA uses data collected through the [National Survey of Substance Abuse Treatment Services](#) (N-SSATS) and [National Mental Health Services Survey](#) (N-MHSS) to update its Behavioral Health Treatment Locator, an online tool for persons seeking treatment facilities in the United States or U.S. Territories for substance abuse/addiction and/or mental health problems.

Recent HHS publications on opioids and minority populations include the following.

- SAMHSA published *The Opioid Crisis and the Black/African American Population: An Urgent Issue* in April 2020. This issue [brief](#) provides recent data on prevalence of opioid misuse and opioid overdose death rates in the Black/African American population in the U.S; discusses contextual factors that impact the opioid epidemic in these communities, including challenges to accessing early intervention and treatment; highlights innovative outreach and engagement strategies that have the potential to connect individuals with evidence-based prevention, treatment, and recovery; and emphasizes the importance of ongoing community voice and leadership in the development and implementation of solutions to this public health crisis.
- SAMHSA published *The Opioid Crisis and the Hispanic/Latino Population: An Urgent Issue* in July 2020. This issue brief provides an overview of the contextual factors influencing opioid misuse and opioid use disorder in Hispanic/Latino communities, highlights outreach and engagement strategies for prevention, treatment, and recovery interventions, and illustrates the importance of ongoing community voice and leadership in addressing the opioid crisis.
- The CDC Morbidity and Mortality Weekly Report (MMWR) published *Racial/Ethnic and Age Group Differences in Opioid and Synthetic Opioid-Involved Overdose Deaths Among Adults Aged ≥18 Years in Metropolitan Areas – United States, 2015-2017* in November 2019. This [report](#) examines the variation in synthetic opioid involvement in these deaths among racial/ethnic age groups across different metropolitan areas. The findings underscore the changing demographics and populations affected by the opioid overdose epidemic likely driven by the proliferation of illicitly manufactured fentanyl or fentanyl analogs. The March 2020 MMWR [report](#) highlights decreases from 2018 to 2017 in overdose death rates involving all opioids (2% decline), prescription opioids (14% decline), and heroin (4% decline); rates involving synthetic opioids increased 10%.

## **B. Maternal and Infant Health**

- Improving Maternal Mortality Data Collection and Surveillance: State and local Maternal Mortality Review Committees (MMRCs) have the potential to get the most detailed, complete data on maternal mortality necessary for developing effective recommendations for prevention. Review Committees have access to multiple sources of information that provide a deeper understanding of the circumstances surrounding a death. In FY 2019, CDC made 24 awards, supporting 25 states for the Enhancing Reviews and Surveillance to Eliminate Maternal Mortality (ERASE MM) Program. This funding directly supports agencies and organizations that coordinate and manage Maternal Mortality Review Committees to identify, review, and characterize maternal deaths; and identify prevention opportunities. To help facilitate standardization of data collection across states, CDC developed and maintains the Maternal Mortality Review Information Application (MMRIA), which is available to all MMRCs. MMRIA facilitates MMRC prevention recommendations that often include strategies to address social determinants of health, such as prioritizing pregnant and postpartum women for temporary housing programs; strengthening or building systems to

link persons to affordable transportation, or provide transportation vouchers to medical appointments; and ensuring access to interpreter services when needed. CDC has also incorporated into MMRIA the ability to capture information on discrimination, interpersonal and structural racism when identified as factors in pregnancy-related deaths.

- Supporting Research on Racial Disparities in Maternal Mortality and Morbidity: In April 2020, the National Institutes of Health (NIH) released a funding opportunity announcement (FOA), “Addressing Racial Disparities in Maternal Mortality and Morbidity.” It is sponsored jointly by the National Institute on Minority Health and Health Disparities, the National Heart, Lung, and Blood Institute, the National Institute of Nursing Research, and the NIH Office of the Director. This FOA will support original, innovative, multidisciplinary research aimed at advancing the understanding, prevention, and reduction of maternal mortality or morbidity among racial and ethnic minority women and socioeconomically disadvantaged women including those in rural settings. As stated in the FOA, research projects can focus on any point across the continuum of care, from preconception care to postpartum care up to 1 year after labor or delivery. Research projects are expected to provide a theoretical framework that addresses the intersection of domains of influence (biological, behavioral, physical, sociocultural, psychosocial, and health care system) and levels of influence (individual, interpersonal, community, and societal). Examples of individual-level factors include pre-pregnancy obesity, maternal hypertension, gestational weight gain, peripartum obesity, pre-eclampsia, pre-diabetes, and gestational diabetes on maternal post-partum health outcomes in women from racial and/or ethnic populations. Other examples at higher levels of influence include, but are not limited to, patient-clinician communication; clinician implicit and explicit bias, availability or accessibility of healthcare; healthcare insurance and reimbursement policies; structural factors in the healthcare settings; availability of social services; social, family, and peer support; interpersonal, community, or societal-level discrimination or violence exposure; the local food environment; and the physical and chemical environment in the home, workplace, and community.
- The HHS Office of Minority Health website hosts the [Compendium of Federal Datasets Addressing Health Disparities](#). The Compendium of Federal Datasets Addressing Health Disparities is a free resource of publicly available data relevant to research and programs aiming to reduce health disparities by exploring the relationship between socioeconomic factors and the social determinants of health. The Compendium, an initiative of the Interdepartmental Health Equity Collaborative (IHEC), includes data and data-related resources from various federal agencies within the U.S. Department of Health and Human Services (HHS). The Compendium provides information on federal resources related to the Opioid Crisis and Maternal Health.
- Understanding the Impact of Substance Use during Pregnancy on Maternal and Infant Health: CDC works to address the impact of substance use during pregnancy by collecting data that drive public health action to support the health of pregnant women and their children. CDC assesses trends in alcohol and polysubstance use in pregnancy, conducts

surveillance of neonatal abstinence syndrome (NAS), and monitors healthcare provider behaviors related to alcohol screening and brief intervention (SBI). Through funding from an interagency agreement with the HHS Assistant Secretary for Planning and Evaluation's Patient-Centered Outcomes Research Trust Fund, CDC also recently established MAT-LINK. This system will monitor maternal, infant, and child health outcomes associated with treatment of opioid and substance use disorder during pregnancy. Through each of these activities, data on race and ethnicity are collected and help identify potential disparities and provide information to help address the impact of substance use during pregnancy so that pregnant women and their babies can thrive.

- Providing Critical Data on Emerging Threats to Mothers and their Babies: Pregnant women and babies are uniquely vulnerable to infectious disease outbreaks, harmful substances, natural disasters, and environmental hazards. Rapid data collection among these populations is essential to inform public health action. CDC's Surveillance for Emerging Threats to Mothers and Babies was established in 2019 and adapts the mother-baby linked surveillance approach from the Zika outbreak to detect the impact of other known and emerging health threats during pregnancy, like hepatitis C, syphilis, and COVID-19. Data on race and ethnicity are collected and help identify potential disparities and inform the medical care of pregnant women and babies affected by these emerging infectious diseases.

### C. COVID-19 Response and Recovery

- Improving COVID-19 Data Collection and Reporting by Race/Ethnicity: The collection and reporting of race and ethnicity data is essential to address targeted needs of racial and ethnic communities impacted by COVID-19. In addition, reliable and timely data to identify the populations that are most vulnerable to COVID-19 or any infectious disease is critical. As of August 11, 2020, CDC has received a total of 3,822,986 case reports. Among these case reports, 60% contain race data, 50% contain ethnicity data, and 48% contain race and ethnicity data. Overall, from April 2 to August 11, there was an improvement in completeness of race and ethnicity in the case reports, from 21% to 60% for race and from 18% to 50% for ethnicity. Additionally, on June 4, 2020, HHS issued new guidance under the CARES Act that specifies laboratories must report additional demographic data, including patient race and ethnicity, to state and local health departments for all COVID-19 test results beginning in August 2020. Under this new guidance, we expect to gain critical information about people who test positive for COVID-19, including data on race and ethnicity. In addition, CDC reports and advises on the disproportionate impact of COVID-19 among racial and ethnic minority groups in the following ways.
  - Social Vulnerability Index: The CDC constructs and maintains the [Social Vulnerability Index \(SVI\)](#), which uses U.S. Census variables that reflect at-risk populations to identify and map vulnerable areas. The SVI also provides prepared maps that show geographic patterns of potential vulnerability of local areas, arranged by four themes: socioeconomic status; household composition and disability; minority status and language; and housing and transportation. OMH has been working with the Geospatial Research, Analysis, and



Services Program (GRASP) team at CDC to develop a COVID-19-specific SVI that will add more granular race/ethnicity categories, English language proficiency and languages spoken, internet access, and some measures of medical vulnerability such as chronic health conditions, hospital beds, ICUs, and ventilator availability.

- **COVID-NET:** The CDC maintains the Coronavirus-Associated Hospitalization Surveillance Network ([COVID-NET](#)), which is a population-based surveillance system that collects data on laboratory-confirmed COVID-19-associated hospitalizations among children and adults through a network of over 250 acute-care hospitals in 14 states. COVID-NET is CDC's source of important data on hospitalization rates associated with COVID-19. COVID-NET also provides important clinical information on COVID-19-associated hospitalizations, including age group, sex, race/ethnicity and underlying health conditions. COVID-NET covers approximately 10% of the U.S. population. The counties covered are located in all 10 HHS regions.
- **NCHS death certificate reporting:** The CDC National Center for Health Statistics (NCHS) uses incoming data from death certificates to produce provisional COVID-19 death [counts](#) that occur within the 50 states and the District of Columbia. While death certificates are the best source of mortality data since they are reviewed by medical examiners, it takes some time to be processed, coded, tabulated, and reported through the National Vital Statistics System. NCHS also provides summaries that examine deaths in specific categories and in greater geographic detail, such as deaths by county, by race and Hispanic origin.
- **Morbidity and Mortality Weekly Report (MMWR):** CDC has published several MMWRs reporting COVID-19 data by race/ethnicity, including county-level incidence disparities, cases among AI/ANs, differences in mortality, and hospitalizations.

#### **V. Increase the efficiency, transparency and accountability of HHS programs**

To ensure that programs and policies are efficient, transparent, and accountable, HHS has established systems to support information sharing across agencies and minimize duplication of efforts. HHS also has implemented processes to track, assess, and report on the impact of programmatic and policy efforts to address health disparities. These processes include tracking existing performance measures and other government data on health system indicators and making them available to the public.

[Healthy People](#) provides a strategic framework for a national prevention agenda that communicates a vision for improving health and achieving health equity; identifies science-based, measurable objectives with targets to be achieved by the end of the decade; requires tracking of data-driven outcomes to monitor progress and to motivate, guide, and focus action; and offers a model for program planning at the international, state, and local level. For three decades, Healthy People has established benchmarks and monitored progress over time to:

- Encourage collaborations across communities and sectors;
- Empower individuals toward making informed health decisions; and
- Measure the impact of prevention activities.

HHS provides data to track progress on the Healthy People 2020 goals and objectives, which include objectives related to maternal and infant health and substance use. OMH, the Office of Disease Prevention and Health Promotion and NCHS also developed a tool that shows health disparities information for measurable, population-based objectives where data are available. The framework, goals and objectives for Healthy People 2030 have been released.

The HHS [2018-2022 Strategic Plan](#) outlines Departmental goals and objectives, which are aligned with performance measures. HHS publishes an annual performance plan and report to provide information on HHS's progress toward achieving the Strategic Plan goals and objectives. Performance measure information is also provided on [Performance.gov](#), including information on the HHS agency priority goal on reducing opioid morbidity and mortality.

## **Addressing Barriers to Reducing Racial and Ethnic Health Disparities**

### **The Opioid Crisis**

A number of challenges act as barriers to reducing racial and ethnic disparities in opioid misuse, overdose-related mortality, and treatment including stigma related to substance issues and treatment, lack of access to affordable services, lack of availability of culturally and linguistically appropriate services and culturally competent providers, lack of knowledge about medication-assisted treatment (MAT), bias and discrimination in treatment delivery, and criminalization of substance misuse. HHS has worked to address these barriers by supporting efforts to increase awareness and education about opioid-related risks, MAT and overdose prevention; to increase workforce capacity to improve access to MAT by providing training and certification guidance; to increase treatment capacity through funding to behavioral health agencies and integrated care settings; to improve cultural competency among behavioral health professionals through training; and to improve coverage of substance use disorder treatment services through Medicaid and Medicare.

### **Maternal and Infant Health**

Barriers to reducing racial and ethnic health disparities in maternal and infant health outcomes include the multi-factorial etiology of such disparities, including the social determinants of health, such as socioeconomic factors, access to cultural and linguistically appropriate care, disrespectful treatment, housing, transportation, and education; as well as discrimination and institutional racism and access and quality of care. Although the factors that contribute to these disparities cannot be entirely addressed by the federal government, the HHS agencies/offices are working together to develop strategies to transcend these barriers and make America one of the safest nations for any woman to give birth.

### **COVID-19 Response and Recovery**

Barriers to reducing COVID-19 disparities among racial and ethnic minority individuals are associated with a number of potential contributing factors, including lack of knowledge about COVID-19, lack of availability of healthcare services in the community, inability to pay for services, and lack of culturally and linguistically appropriate services (including language access services and culturally competent and/or bilingual providers). A recent study found that persons living in communities with higher proportion of racial and ethnic minority population were more likely to have more than 20 minutes travel time to a COVID-19 testing site.<sup>16</sup> The difference in travel time may limit access to and utilization of testing services for those who have limited access to transportation and those who live in areas with fewer public transit services and schedules. Other factors that may affect access to and utilization of testing services include lack of healthcare insurance, concern about the costs or co-pays, occupational factors such as not being able to take time off of work, lack of paid leave, and distrust of the government and healthcare systems.<sup>17,18,19,20</sup> Strategies to address barriers to reducing disparities include improving the development and dissemination of culturally and linguistically appropriate messaging and information about COVID-19 testing and healthcare services; working with community partners to support outreach, education and linkages to services; using data to identify socially vulnerable/high-need areas in which to place COVID-19 testing sites; continuing to increase the capacity of IHS facilities and health centers to provide COVID-19 testing and healthcare services; disseminating CMS information about Medicare and Medicaid coverage of COVID-19 testing and services; and promoting cultural competency training and workforce diversity programs. Addressing these barriers are important for the COVID-19 response and to address disparities more broadly.

## Conclusions

The U.S. Department of Health and Human Services will continue to lead the implementation of strategic policies and programs with the goals of improving health and reducing health disparities for racial and ethnic minority populations. Unfortunately, the impacts of COVID-19 have likely exacerbated many of the factors that are associated with health disparities. However, the current challenging circumstances have galvanized HHS' steadfast commitment to address disparities in access to and quality of care, strengthen cultural and linguistic knowledge in health care systems, promote public health measures that support health, and advance data collection

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<sup>16</sup> Rader B, Astley CM, Therese K, et al. Geographic access to United States SARS-CoV-2 testing sites highlights healthcare disparities and may bias transmission. *Journal of Travel Medicine*. 2020. <https://doi.org/10.1093/jtm/taaa076>

<sup>17</sup> Berchick, Edward R., Jessica C. Barnett, and Rachel D. Upton Current Population Reports, P60-267(RV), Health Insurance Coverage in the United States: 2018, U.S. Government Printing Office, Washington, DC, 2019.

<sup>18</sup> Institute of Medicine (US) Committee on the Consequences of Uninsurance. *Care Without Coverage: Too Little, Too Late*. Washington (DC): National Academies Press (US); 2002. DOI: <https://doi.org/10.17226/10367>external icon.

<sup>19</sup> Economic Policy Institute. Black workers face two of the most lethal preexisting conditions for coronavirus—racism and economic inequality [online]. 2020 [cited 2020 Jun 28]. Available from URL: <https://www.epi.org/publication/black-workers-covid/>external icon

<sup>20</sup> Institute of Medicine. 2003. *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*. Washington, DC: The National Academies Press. DOI: <https://doi.org/10.17226/10260>external icon.

and research consistent with the HHS Action Plan to Reduce Racial and Ethnic Health Disparities.





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## Sexual Orientation Disparities in Risk Factors for Adverse COVID-19–Related Outcomes, by Race/Ethnicity — Behavioral Risk Factor Surveillance System, United States, 2017–2019

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Sexual minority persons experience health disparities associated with sexual stigma and discrimination and have a high prevalence of several health conditions that have been associated with severe coronavirus disease 2019 (COVID-19) (1,2). Current COVID-19 surveillance systems do not capture information about sexual orientation. To begin bridging the gap in knowledge about COVID-19 risk among sexual minority adults, CDC examined disparities between sexual minority and heterosexual adults in the prevalence of underlying conditions with strong or mixed evidence of associations with severe COVID-19–related illness (3), by using data from the 2017–2019 Behavioral Risk Factor Surveillance System (BRFSS).<sup>\*</sup> When age, sex, and survey year are adjusted, sexual minority persons have higher prevalences than do heterosexual persons of self-reported cancer, kidney disease, chronic obstructive pulmonary disease (COPD), heart disease (including myocardial infarction, angina, or coronary heart disease), obesity, smoking, diabetes, asthma, hypertension, and stroke. Sexual minority adults who are members of racial/ethnic minority groups disproportionately affected by the pandemic also have higher prevalences of several of these health conditions than do racial/ethnic minority adults who are heterosexual. Collecting data on sexual orientation in COVID-19 surveillance and other studies would improve knowledge about disparities in infection and adverse outcomes by sexual orientation, thereby informing more equitable responses to the pandemic.

<sup>\*</sup> BRFSS collects information on demographics and health, including underlying conditions, use of preventive services, health care access, and health-related behavioral risk factors for the 50 states, District of Columbia, three U.S. territories (American Samoa, Guam, and U.S. Virgin Islands), and two freely associated states (Federated States of Micronesia and Palau). <https://www.cdc.gov/brfss/index.html>

Conducted by the 50 states, the District of Columbia, three U.S. territories, and two freely associated states, BRFSS is a collection of population health surveys that gather demographic and health-related information from noninstitutionalized U.S. residents aged ≥18 years. BRFSS includes standard core

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questions and optional modules. All participants are asked “Has a doctor, nurse, or other health practitioner ever told you that you have...” followed by a list of health conditions.<sup>†</sup> The number of jurisdictions opting to include questions on sexual orientation in BRFSS has increased in recent years. Gender identity is addressed in a BRFSS survey question separately from sexual orientation questions. This analysis combined the 3 most recent years of BRFSS data for states that include a sexual orientation question: a total of 28 states in 2017, a total of 29 states in 2018, and a total of 31 states in 2019.<sup>§</sup> The percentage of BRFSS respondents who refused to answer the sexual orientation question was 1.8% (both male and female) in 2017, 1.5% (male) and 1.9% (female) in 2018, and 1.6% (male) and 2.0% (female) in 2019. Among states with a sexual

orientation question, the median overall survey response rate was 42.3% in 2017, 48.5% in 2018, and 46.4% in 2019.

For this analysis, respondents were classified as sexual minority persons (versus heterosexual persons) if they selected any of the following responses from the 2017–2019 questions on sexual orientation: “gay,” “lesbian or gay,” or “bisexual.”<sup>¶</sup> (sexual minority: 24,582 [unweighted], 4.7% [weighted];

<sup>†</sup> Health conditions were elicited by the question “Has a doctor, nurse, or other health practitioner ever told you that you have...” followed by a set of conditions, including those used in this analysis: a heart attack, also called a myocardial infarction; angina or coronary heart disease; stroke; asthma (with positive responses followed by “Do you still have asthma?”); any other type of cancer (other than skin cancer); chronic obstructive pulmonary disease, emphysema, or chronic bronchitis; kidney disease (not including kidney stones, bladder infection, or incontinence); or diabetes (followed by questions allowing separation of gestational diabetes, prediabetes, and borderline diabetes). Hypertension was assessed separately but with the same question format. Possible responses to these questions were “yes,” “no,” “don’t know/not sure,” or refused. Because coronary heart disease is the most common cause of heart attack/myocardial infarction, respondents answering affirmatively to questions about a heart attack/myocardial infarction, angina, or coronary heart disease were counted as having heart disease.

<sup>§</sup> Jurisdictions with a sexual orientation question in 2017 were California, Connecticut, Delaware, Florida, Georgia, Hawaii, Illinois, Indiana, Iowa, Louisiana, Massachusetts, Minnesota, Mississippi, Montana, Nevada, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Carolina, Texas, Vermont, Virginia, Washington, Wisconsin, and Guam. Jurisdictions with a sexual orientation question in 2018 were Connecticut, Delaware, Florida, Hawaii, Idaho, Illinois, Kansas, Louisiana, Maryland, Minnesota, Mississippi, Missouri, Montana, Nevada, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Vermont, Virginia, Washington, West Virginia, Wisconsin, and Guam. Jurisdictions with a sexual orientation question in 2019 were Alaska, Arizona, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Idaho, Indiana, Kansas, Louisiana, Maryland, Minnesota, Mississippi, Montana, New York, North Carolina, Ohio, Oklahoma, Rhode Island, South Carolina, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, and Guam.

<sup>¶</sup> In 2017, the BRFSS question on sexual orientation was “Do you consider yourself to be: straight, lesbian or gay, or bisexual?” The interviewer recorded responses of “other,” “don’t know/not sure,” and refusals. In 2018 and 2019, the BRFSS question on sexual orientation was “Which of the following best represents how you think of yourself?” Response options for men were “gay”; “straight, that is, not gay”; “bisexual”; and “something else.” Response options for women were “lesbian or gay”; “straight, that is, not gay”; “bisexual”; and “something else.” The interviewer recorded “don’t know” responses and refusals. The analysis excludes 3.4% of respondents who responded “something else,” “other,” or “don’t know” to the sexual orientation question or who refused to respond.

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heterosexual: 619,374 [unweighted], 95.3% [weighted]). Race and ethnicity were categorized as Hispanic (any race), non-Hispanic Black, non-Hispanic White, and non-Hispanic other; the non-Hispanic other category includes non-Hispanic Asian, non-Hispanic American Indian/Alaskan Native, and non-Hispanic persons of other races/ethnicities. Adults with the following conditions are at increased risk for severe illness from COVID-19: cancer, chronic kidney disease, COPD, heart conditions, obesity, pregnancy, sickle cell disease, smoking, and type 2 diabetes mellitus (3). In addition, adults with the following conditions might be at increased risk for severe illness from COVID-19: asthma, cerebrovascular disease, cystic fibrosis, hypertension, immunocompromised state, neurologic conditions (e.g., dementia), liver disease, overweight, pulmonary fibrosis, thalassemia, and type 1 diabetes mellitus. Among these conditions with strong or mixed evidence of associations with adverse COVID-19–related outcomes (3,4), the following variables from the BRFSS core module were included: asthma (current and ever), cancer (except nonmelanoma skin cancer), COPD, heart disease (myocardial infarction, angina, or coronary heart disease) (4), diabetes, hypertension, kidney disease, obesity (current), smoking (current), and stroke. Hypertension questions were asked only in 2017 and 2019.\*\*

Adjusted percentages and adjusted prevalence ratios (aPRs) comparing sexual minority persons and heterosexual persons with each condition were calculated overall and stratified by race/ethnicity. Using Stata (version 16.0; StataCorp) software to account for the BRFSS survey design, all estimates were adjusted for age, sex (male or female), and survey year, using multivariate logistic regression with the margins and nonlinear combination of estimators (nlcom) postestimation commands. The nlcom procedure takes nonlinear transformations of a parameter estimate from a fitted model and applies the delta method to calculate the variance. All aPRs with 95% confidence intervals that exclude 1 are considered statistically significant.

Among all racial/ethnic groups combined, sexual minority persons had higher adjusted prevalences of asthma (current and ever), cancer, heart disease, COPD, hypertension, kidney

disease, obesity (current), smoking (current), and stroke than did heterosexual persons (Table). Among non-Hispanic Black persons, sexual minority persons had higher adjusted prevalences of asthma (current and ever), COPD, and smoking (current) than did heterosexual persons. Among non-Hispanic White persons, sexual minority persons had higher adjusted prevalences of asthma (current and ever), cancer, COPD, diabetes, hypertension, kidney disease, obesity (current), smoking (current), and stroke than did heterosexual persons. Among Hispanic persons, sexual minority persons had higher adjusted prevalences of asthma (current and ever), cancer, COPD, smoking (current), and stroke than did heterosexual persons. Among non-Hispanic other persons, sexual minority persons had higher adjusted prevalences of asthma (current and ever), cancer, heart disease, COPD, obesity (current), and smoking (current) than did heterosexual persons. Among the 11 conditions studied, the highest significant aPRs were observed among sexual minority persons overall, and for eight of these 11 conditions, the highest significant aPRs were among sexual minority persons within a racial/ethnic minority group. None of the 11 conditions studied was more prevalent among heterosexual persons than among members of sexual minority groups.

## Discussion

This analysis found that several underlying health conditions that increase or might increase the risk for more severe COVID-19–related illness were more prevalent among sexual minority persons than heterosexual persons, both within the overall population and within specific racial/ethnic groups. Non-Hispanic Black and Hispanic populations have been disproportionately affected by the COVID-19 pandemic in the United States, and the increased prevalence of certain risk factors among sexual minority members of these racial/ethnic minority populations is of particular concern. Because of their sexual orientation, sexual minority persons experience stigmatization and discrimination (1) that can increase vulnerabilities to illness and limit the means to achieving optimal health and well-being through meaningful work and economic security, routine and critical health care, and relationships in which sexual orientation and gender identity can be openly expressed (5). Persons who are members of both sexual minority and racial/ethnic minority groups might therefore experience a convergence of distinct social, economic, and environmental disadvantages that increase chronic disease disparities and the risk for adverse COVID-19–related outcomes.

In November 2020, CDC conducted a series of group listening sessions with representatives of advocacy and health care organizations serving sexual and gender minority communities across the United States to gather information on the effect of the pandemic on their constituents and patient

\*\* The differences between the CDC list of conditions that place adults at increased risk for severe illness from COVID-19 and the BRFSS variables are the following, respectively: current cancer versus lifetime history of (ever) cancer; current chronic kidney disease versus ever kidney disease; current chronic obstructive pulmonary disease versus ever chronic obstructive pulmonary disease; current heart condition versus ever coronary heart disease, angina, or heart attack/myocardial infarction; obesity and severe obesity versus obesity; and current type 2 diabetes mellitus versus ever diabetes. BRFSS does not include a variable on sickle cell disease, which is one of the conditions on the CDC “at increased risk” list. The differences between the CDC list and BRFSS variables are the following, respectively: moderate to severe asthma versus asthma; current cerebrovascular disease versus ever stroke; current hypertension versus ever hypertension; and current type 1 diabetes mellitus versus ever diabetes.

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**TABLE. Adjusted prevalence and adjusted prevalence ratios (aPRs)\* of underlying health conditions† among sexual minority§ and heterosexual adults, by race and Hispanic origin — Behavioral Risk Factor Surveillance System, United States, 2017–2019**

Characteristic	% (95% CI)				
	All	Black, non-Hispanic	White, non-Hispanic	Other, non-Hispanic	Hispanic
Respondents, no.	643,956	54,486	495,278	51,781	42,411
Sexual minority persons,¶ no. (%)	24,582 (4.7)	2,004 (4.7)	17,656 (4.4)	2,616 (5.5)	2,306 (5.3)
<b>Underlying condition</b>					
<b>Asthma, current</b>					
Sexual minority	13.8 (13.0–14.6)	14.5 (12.2–16.8)	13.3 (12.4–14.3)	13.5 (11.1–16.0)	14.2 (11.5–16.9)
Heterosexual	8.9 (8.8–9.1)	10.7 (10.2–11.2)	9.2 (9.0–9.3)	8.1 (7.5–8.7)	6.8 (6.3–7.3)
aPR	1.55 (1.45–1.64)	1.35 (1.13–1.58)	1.46 (1.35–1.56)	1.67 (1.35–2.00)	2.09 (1.67–2.51)
<b>Asthma, ever</b>					
Sexual minority	19.8 (18.8–20.8)	21.0 (18.2–23.8)	19.1 (18.0–20.1)	19.7 (16.7–22.8)	20.9 (17.7–24.0)
Heterosexual	14.1 (13.9–14.2)	15.9 (15.3–16.5)	14.3 (14.1–14.6)	13.3 (12.5–14.0)	11.8 (11.2–12.4)
aPR	1.41 (1.34–1.48)	1.32 (1.14–1.50)	1.33 (1.25–1.41)	1.49 (1.24–1.73)	1.78 (1.49–2.06)
<b>Cancer**</b>					
Sexual minority	9.2 (8.4–10.0)	7.9 (5.6–10.2)	9.2 (8.4–9.9)	9.1 (6.5–11.6)	9.7 (6.2–13.3)
Heterosexual	7.3 (7.2–7.4)	6.1 (5.8–6.5)	7.8 (7.6–7.9)	5.8 (5.3–6.4)	5.9 (5.4–6.5)
aPR	1.26 (1.15–1.37)	1.29 (0.90–1.67)	1.18 (1.08–1.28)	1.56 (1.10–2.02)	1.64 (1.02–2.26)
<b>Heart disease††</b>					
Sexual minority	8.0 (7.3–8.9)	8.8 (6.2–11.4)	7.3 (6.6–8.0)	10.9 (7.8–14.1)	9.8 (6.6–13.0)
Heterosexual	6.8 (6.6–6.9)	7.0 (6.6–7.4)	6.7 (6.6–6.8)	7.0 (6.5–7.5)	6.7 (6.1–7.3)
aPR	1.19 (1.08–1.30)	1.26 (0.88–1.64)	1.09 (0.98–1.19)	1.56 (1.10–2.03)	1.46 (0.97–1.95)
<b>COPD</b>					
Sexual minority	10.3 (9.5–11.1)	10.2 (7.8–12.7)	10.1 (9.4–11.1)	9.2 (7.1–11.3)	10.3 (7.3–13.3)
Heterosexual	6.9 (6.8–7.0)	7.1 (6.7–7.6)	7.3 (7.2–7.5)	5.9 (5.4–6.3)	4.8 (4.3–5.3)
aPR	1.49 (1.37–1.61)	1.44 (1.09–1.78)	1.40 (1.28–1.52)	1.45 (1.14–1.76)	2.15 (1.49–2.81)
<b>Diabetes</b>					
Sexual minority	12.5 (11.6–13.4)	18.5 (15.3–21.7)	11.0 (10.1–11.9)	17.4 (13.1–21.6)	14.6 (11.4–17.7)
Heterosexual	11.6 (11.4–11.7)	17.1 (16.6–17.7)	9.8 (9.6–9.9)	13.7 (12.9–14.4)	16.1 (15.3–16.8)
aPR	1.08 (1.00–1.16)	1.08 (0.89–1.27)	1.12 (1.03–1.22)	1.27 (0.95–1.59)	0.91 (0.71–1.11)
<b>Hypertension§§</b>					
Sexual minority	35.7 (34.2–37.1)	45.4 (41.5–49.4)	34.9 (33.2–36.5)	35.9 (30.1–41.1)	32.3 (27.4–37.2)
Heterosexual	33.6 (33.3–33.9)	45.2 (44.3–46.1)	32.1 (31.8–32.4)	31.0 (29.7–32.2)	32.1 (31.1–33.1)
aPR	1.06 (1.02–1.11)	1.01 (0.92–1.09)	1.09 (1.05–1.14)	1.16 (0.98–1.33)	1.01 (0.85–1.16)
<b>Kidney disease</b>					
Sexual minority	4.7 (4.0–5.4)	7.2 (4.2–10.2)	4.2 (3.6–4.8)	4.5 (3.0–5.9)	5.8 (2.7–8.8)
Heterosexual	3.2 (3.1–3.3)	4.2 (3.8–4.5)	2.9 (2.8–3.0)	3.6 (3.0–4.1)	3.7 (3.3–4.1)
aPR	1.47 (1.25–1.69)	1.73 (0.99–2.46)	1.42 (1.22–1.63)	1.25 (0.80–1.70)	1.55 (0.71–2.39)
<b>Obesity (BMI≥30 kg/m<sup>2</sup>)</b>					
Sexual minority	34.1 (32.9–35.3)	41.4 (37.6–45.1)	33.6 (32.3–35.0)	26.2 (22.8–29.7)	35.4 (31.5–39.3)
Heterosexual	31.9 (31.6–32.1)	41.0 (40.2–41.8)	30.5 (30.2–30.7)	22.1 (21.1–23.0)	35.4 (34.4–36.5)
aPR	1.07 (1.03–1.11)	1.01 (0.92–1.10)	1.10 (1.06–1.15)	1.19 (1.03–1.35)	1.00 (0.89–1.11)
<b>Smoking, current</b>					
Sexual minority	22.1 (21.1–23.1)	22.4 (19.4–25.4)	22.9 (21.7–24.0)	19.1 (16.2–22.0)	19.1 (16.0–22.2)
Heterosexual	15.5 (15.3–15.7)	16.9 (16.3–17.5)	16.5 (16.3–16.7)	12.8 (12.2–13.5)	11.5 (10.8–12.1)
aPR	1.43 (1.36–1.50)	1.32 (1.14–1.51)	1.39 (1.31–1.46)	1.49 (1.25–1.73)	1.67 (1.38–1.95)
<b>Stroke</b>					
Sexual minority	4.7 (4.1–5.4)	7.5 (5.1–9.9)	4.0 (3.4–4.5)	5.7 (3.2–8.2)	6.2 (3.5–8.9)
Heterosexual	3.4 (3.4–3.5)	5.5 (5.2–5.9)	3.2 (3.1–3.3)	3.6 (3.2–4.0)	3.0 (2.6–3.4)
aPR	1.37 (1.19–1.56)	1.36 (0.91–1.81)	1.24 (1.05–1.43)	1.59 (0.88–2.30)	2.08 (1.13–3.00)

**Abbreviations:** BMI = body mass index; CI = confidence interval; COPD = chronic obstructive pulmonary disease.

\* Adjusted for age, sex (female or male), and Behavioral Risk Factor Surveillance System survey year. Adjusted prevalence ratios with 95% CIs that exclude 1 are statistically significant.

† Includes conditions with strong or mixed evidence of associations with COVID-19–associated adverse outcomes.

§ Includes persons who identified as gay, lesbian or gay, or bisexual. The analysis excludes those who responded to the sexual orientation question with “something else,” “other,” or “don’t know” or who refused (3.4% of respondents).

¶ Unweighted number of respondents.

\*\* Lifetime history of cancer, except nonmelanoma skin cancer.

†† Includes heart attack/myocardial infarction, coronary heart disease, or angina.

§§ 2017 and 2019 Behavioral Risk Factor Surveillance Systems only.



populations. A major concern expressed in these sessions was that information about sexual orientation and gender identity is not standard in COVID-19 data collection systems. Privacy issues around sexual orientation and concerns about nonresponse or refusals to answer such questions have often been used as justification for not including these elements in public health surveillance and patient record systems (6); however, regarding public health surveillance systems, CDC surveys such as BRFSS, the National Health Interview Survey, and the National Survey on Family Growth have demonstrated the feasibility of collecting sexual orientation data from the civilian, noninstitutionalized population on an ongoing basis (2). Several months into the COVID-19 pandemic, several states and local jurisdictions responded to demands from advocacy organizations to begin collecting these data. For example, in July 2020, California Health and Human Services announced emergency regulations that required local health departments and service providers to collect and report voluntary data on sexual orientation and gender identity to better understand the effect of COVID-19 in these population subgroups. Illinois has included a COVID-19 module in its 2020 BRFSS that also includes questions on sexual orientation and gender identity (7). Pennsylvania, the District of Columbia, and several other jurisdictions are taking steps toward including sexual orientation and gender identity information in COVID-19–related data collection; however, these data are not yet available (6).

The findings in this report are subject to at least six limitations. First, all conditions are self-reported, and all but three (asthma, obesity, and smoking) refer to lifetime instead of current prevalence. Second, although the 3-year data set included as many as 31 states in 2019, the data are not nationally representative. Third, although BRFSS variables used in this analysis are general measures of the list of underlying health conditions identified by CDC as COVID-19 risk factors (3), they do not always reflect the clinical specificity of the condition list; for example, the diabetes question does not distinguish between type 1 and type 2 diabetes, and the heart disease variable includes conditions that might not affect COVID-19 outcomes (4). Fourth, several important underlying health conditions, such as sickle cell disease, have no corresponding variable in BRFSS. Fifth, although BRFSS includes a question on gender identity, the number of respondents identifying as transgender or nonbinary was too small for reliable estimates compared with the majority cisgender population. Finally, the large number of respondents in the aggregated non-Hispanic other race/ethnicity category could potentially obscure disparities between sexual minority and heterosexual populations within these smaller communities.

## Summary

### What is already known about this topic?

Risks for COVID-19 acquisition and severe associated illness vary by characteristics, including race/ethnicity, age, and urban/rural residence. U.S. COVID-19 surveillance systems lack information on sexual orientation, hampering examination of COVID-19–associated disparities among sexual minority adults.

### What is added by this report?

Sexual minority persons in the United States have higher self-reported prevalences of several underlying health conditions associated with severe outcomes from COVID-19 than do heterosexual persons, both in the overall population and among racial/ethnic minority groups.

### What are the implications for public health practice?

Inclusion of sexual orientation and gender identity data in COVID-19 surveillance and other data collections could improve knowledge about disparities in infections and adverse outcomes among sexual and gender minority populations, overall and by race/ethnicity.

Despite the numerous studies among racial/ethnic minority groups and the increasing number of studies among sexual minority groups, examinations of health outcomes by combinations of sexual orientation and race/ethnicity remain relatively rare. Attention to potentially larger disparities at the intersections of sexual orientation and race/ethnicity is critical to ensuring health equity for all, including subpopulations whose circumstances often remain uncaptured despite acknowledgments of their distinct importance and needs. Because of longstanding social inequities and higher prevalences of several underlying health conditions, sexual minority populations might be vulnerable to COVID-19 acquisition and associated severe outcomes, and this vulnerability might be magnified when coupled with other demographic characteristics such as race/ethnicity (8). However, because data on sexual orientation are not collected in existing COVID-19 data systems, the effect of COVID-19 on sexual minority populations is unknown. This data gap underscores the need to extend COVID-19 surveillance and other studies to include measures of sexual orientation and gender identity. This recommendation is consistent with the emphasis on “key equity indicators” in the January 2021 Executive Order on Ensuring a Data-Driven Response to COVID-19 and Future High-Consequence Public Health Threats (9). Expanding sexual orientation and gender identity data collection to surveillance systems with shorter lags in data reporting could support more equitable representation of sexual and gender minority populations in public health data systems to facilitate improved decision-making during and after the pandemic.

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# GUIDE TO **REDUCING DISPARITIES** — IN — **READMISSIONS**

# Guide to Reducing Disparities in Readmissions

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## Introduction

Guided by The Institute of Medicine (IOM) Report *Crossing the Quality Chasm*, our nation charts a path to deliver equitable care that is safe, efficient, effective, and patient-centered.<sup>1</sup> *Equity* is the principle that quality of care should not vary based on patient characteristics such as race and ethnicity, gender, or socioeconomic status. Recent years have seen a significant transformation of the health care system. An entire set of structures has been developed to facilitate increased access to cost-effective and high-quality care. Pursuing *high-value* health care is the ultimate goal, and health care provider organizations across the country are faced with the daunting challenge of succeeding—and perhaps just surviving—while delivering care to increasingly diverse populations.

One major part of the move towards value-based care—paying for quality, rather than quantity, of services—is a set of financial incentives and disincentives designed to drive quality improvement and control costs for hospital-based care. Preventing avoidable hospital readmissions has become one such cost-controlling priority. It is estimated that roughly two million patients are readmitted a year, costing Medicare \$26 billion. Officials estimate \$17 billion of that comes from potentially avoidable readmissions.<sup>2</sup> To address this issue, the Centers for Medicare & Medicaid Services (CMS)—through Congressional direction and Administration initiatives—implemented the Hospital Readmission Reduction Program (HRRP) in 2012. The CMS program sets up financial penalties for hospitals with relatively higher rates of Medicare readmissions.<sup>3</sup> To determine each hospital’s penalty in the first phase of the program, CMS looked at readmission rates of patients who initially went into the hospital for heart failure, heart attack, and pneumonia but returned within 30 days of discharge. Two conditions were added in FY 2015, elective hip and knee replacements and chronic obstructive pulmonary disease (COPD, which can involve bronchitis and emphysema). In FY 2017 CMS added Coronary Artery Bypass Graft surgery to the HRRP measures and expanded the types of pneumonia cases that are assessed. Currently, hospitals can lose as much as three percent of their Medicare payments under the program.<sup>4</sup> The HRRP is one of several programs included in the U.S. Department of Health and Human Services 2016 *Report to Congress: Social Risk Factors and Performance Under Medicare’s Value-Based Purchasing Programs*. Findings of this report revealed that beneficiaries with social risk factors (including low income, Black race, Hispanic ethnicity, and rural residence), experience worse outcomes on quality measures and that providers serving a disproportionate number of beneficiaries with social risk factors are subject to higher penalties under certain programs like the HRRP. The reasons for this are multifactorial and necessitate efforts to measure and report on performance and quality of care, including disparities in readmissions.<sup>5</sup>

Additionally, studies have shown that certain patient characteristics, such as race, ethnicity, language proficiency, age, socioeconomic status, place of residence, and disability, among others—may predict readmission risk and readmissions, particularly for costly and complicated medical conditions such as heart failure, pneumonia, and acute myocardial infarction.<sup>6–11</sup> Research has demonstrated—and evaluations of the HRRP to date have found—that minority and other vulnerable populations are more likely than their white counterparts to be readmitted within 30 days of discharge for chronic conditions,<sup>12–14</sup> such as congestive heart failure.<sup>15</sup> While not all readmissions are avoidable, a portion of unplanned readmissions may be prevented by addressing the barriers patients face prior to, during, and after admission and discharge.

Given the cost and quality implications of these findings, addressing readmissions while caring for an increasingly diverse population has become a significant concern for hospitals and hospital leaders. This is one part of a larger national effort to address disparities and achieve equity in health care, exemplified by the #123forEquity Campaign spearheaded by the American Hospital Association and several partners (<http://www.equityofcare.org/pledge/index.shtml>). State-level initiatives also present opportunities for hospitals to pledge their commitment to addressing factors associated with readmissions, including the Alliance for a Healthier South Carolina’s Call to Action for Health Equity (<http://healthiersc.org/the-alliance/dashboard-call-to-action/>) and the National CLAS Standards Pledge in Wisconsin (<https://www.thinkculturalhealth.hhs.gov/assets/pdfs/CLASCompendiumWisconsin.pdf>). Hospitals have

requested additional guidance on how to implement both system-wide redesign as well as specific efforts on preventing readmissions among minority populations.

The goals of the guide are to provide:

- An overview of key issues related to disparities in readmissions
- A set of activities that can help hospital leaders address readmissions in this population
- Strategies aimed at reducing readmissions in diverse populations

This guide provides clear, concise, practical, and actionable recommendations for hospital leaders such as CEOs, VPs, team leads, and others who focus on health care quality, safety, and redesign. Recommendations and improvement activities can also be shared and spread by organizations who provide support to hospitals, including Hospital Improvement Innovation Networks (HIINs), Quality Improvement Network-Quality Improvement Organizations (QIN-QIOs), and other stakeholders engaged in readmissions-related quality improvement activities. This guide is aligned with the goals of the CMS Partnership for Patients focused on improving care transitions, reducing 30-day hospital readmissions, making care safer, and reducing costs (<https://partnershipforpatients.cms.gov/>).

The recommendations included in this guide apply to all types of hospitals, including rural, urban, public, and private (among others), and are closely aligned with the *CMS Quality Strategy Goals*. These recommendations can help support a culture of safety; strengthen patient and family engagement in care; encourage effective communication and care coordination; promote effective chronic disease prevention and treatment; foster community cooperation to promote healthy living; and make care more affordable.

To maximize use of this guide, hospitals may:

1. Complete a Disparities Action Statement (<https://www.cms.gov/About-CMS/Agency-Information/OMH/Downloads/Disparities-Action-Statement.pdf>) to learn how to identify, prioritize, and take action on health disparities.
2. Develop or enhance a hospital's existing strategies to include equity as an essential component.<sup>16</sup> The *CMS Equity Plan for Improving Quality in Medicare* ([https://www.cms.gov/About-CMS/Agency-Information/OMH/OMH\\_Dwnld-CMS\\_EquityPlanforMedicare\\_090615.pdf](https://www.cms.gov/About-CMS/Agency-Information/OMH/OMH_Dwnld-CMS_EquityPlanforMedicare_090615.pdf)) is a helpful resource and provides an action oriented, results-driven approach for advancing health equity by improving the quality of care provided by hospitals and other healthcare providers.
3. Develop a "Transitions/Readmissions Care Redesign Team" (details below) or have an existing team review the information included here.
4. Conduct a gap analysis to determine whether the transition/readmission process incorporates recommended strategies and issues.
5. Apply the recommendations presented here for impactful short-term results, as well as for all-encompassing, long-term plans.

In this time of health care transformation and reform, strategies to prevent readmissions among minority populations will be necessary if we are to realize the promise of value in healthcare going forward.

## Overview of Key Issues & Strategies

Data from the Agency for Healthcare Research and Quality indicate that black and Hispanic patients experience higher rates of potentially avoidable readmissions than white patients.<sup>17</sup> Among Medicare beneficiaries, readmission rates for the top conditions in the CMS Hospital Readmissions Reduction Program are higher for black

patients and higher for Hispanic patients with congestive heart failure and acute myocardial infarction (see Appendix A).<sup>7,18, 19-22</sup>

Several factors contribute to disparities in readmission rates for racially and ethnically diverse Medicare beneficiaries. While some of the issues and strategies outlined in the table below (Table 1) are relevant to preventing readmissions in any population, they are particularly important to consider when examining the drivers of readmission and opportunities to eliminate disparities in readmission rates for diverse populations. Along with implementing these strategies, hospitals should systematically examine what they can do to improve care in accordance with the National Standards for Culturally and Linguistically Appropriate Services in Health and Health Care by reviewing *A Practical Guide to Implementing the National CLAS Standards: For Racial, Ethnic and Linguistic Minorities, People with Disabilities and Sexual and Gender Minorities* (<https://www.cms.gov/About-CMS/Agency-Information/OMH/Downloads/CLAS-Toolkit-12-7-16.pdf>).

Research has shown that combining strategies has greater potential for impact, whereas single-component interventions are unlikely to result in a significant change in readmission rates.<sup>23</sup>

**Table 1. Relevant Topics, Key Issues and Recommended Strategies to Reduce Readmissions Among Diverse Populations**

Topic	Key Issues and Recommended Strategies
Discharge and care transitions	<p>Racial and ethnic minorities are less likely than white patients to follow up with a primary care provider or an appropriate specialist after discharge.<sup>24</sup></p> <ul style="list-style-type: none"> <li>• Provide early discharge planning and follow-up for patients at high risk for readmission.<sup>25</sup></li> <li>• Communicate with patients about the importance of early follow-up. Support may be needed to schedule appointments and address potential barriers to follow-up (e.g., lack of usual source of care, transportation issues, language barriers).<sup>26</sup></li> </ul>
Usual Source of Care/Linkage to Primary Care	<p>Racial and ethnic minorities are less likely to be linked to a primary care provider or have a usual source of care. Lack of this linkage leads to lower quality care.<sup>27-29</sup></p> <ul style="list-style-type: none"> <li>• Determine whether the patient is linked to a primary care provider or has a usual source of care.</li> <li>• If no linkage exists, attempt to provide a referral and ensure the patient gets connected to a primary care provider.<sup>30,31</sup></li> </ul>
Language barriers and access to interpreter services	<p>Limited English proficiency is associated with several factors that contribute to avoidable readmissions, including lower rates of outpatient follow-up, use of preventive services, medication adherence, and understanding discharge diagnosis and instructions.<sup>32,33</sup></p> <ul style="list-style-type: none"> <li>• Ensure that patients with limited English proficiency are aware of and have access to professional medical interpreter services during inpatient stays, during discharge, and when accessing post-hospital care.<sup>34</sup></li> <li>• Communicate discharge instructions in the patient's preferred language. Provide written materials at an appropriate literacy level (5<sup>th</sup> grade or lower, as recommended by the Joint Commission) and in the preferred language of the patient and/or caregiver.<sup>35</sup> Simply translating written instructions may be insufficient to ensure patient understanding.<sup>36</sup></li> <li>• Include family members and/or caregivers in care as appropriate, work with members of the extended care team (such as community health workers), and coordinate with traditional healers to help facilitate culturally competent care for patients with limited English proficiency.<sup>37</sup></li> </ul>



Topic	Key Issues and Recommended Strategies
Health literacy	<p>Many factors that contribute to readmissions for racial and ethnic minority populations are associated with health literacy (e.g., limited knowledge of medical condition, poor ability to manage medications and self-care, non-adherence to treatment plans).<sup>38-40</sup></p> <ul style="list-style-type: none"> <li>• Conduct early screening and documentation of literacy and health literacy, and ensure providers are aware of the patient's level of health literacy at all stages of care.<sup>39</sup></li> <li>• Provide discharge instructions and educational materials at an appropriate literacy level, and incorporate adult learning principles to facilitate patient understanding of diagnosis and treatment regimen.<sup>40</sup></li> <li>• Simplify self-care instructions provided to patients.<sup>40</sup></li> <li>• Use common words. Avoid medical jargon. Using relatable language is vital when working with patients with limited English proficiency who may experience additional communication barriers.<sup>36</sup></li> </ul>
Culturally competent patient education	<p>Cultural beliefs and customs influence patients' health behaviors, perceptions of care, and interpretation of medical information or advice.<sup>41-43</sup></p> <ul style="list-style-type: none"> <li>• Facilitate trust with patients by demonstrating respect for cultural practices and beliefs that may impact understanding of the disease, treatment, self-management, and possible outcomes and risks, and tailor patient education accordingly.<sup>44</sup></li> <li>• Engage families in care transitions, as appropriate, and leverage cultural beliefs or practices that promote self-care and family or social support.<sup>43,45</sup></li> <li>• Link patients to community-based educational programs offered by trusted institutions (e.g., faith organizations, cultural organizations)<sup>44</sup></li> <li>• Address cultural factors that may predict medication non-adherence, such as patient perceptions regarding the benefits of Western vs. Eastern medicine and perceptions of susceptibility to disease/harm.<sup>41</sup></li> </ul>
Social determinants	<p>Factors linked to lack of socioeconomic resources are associated with higher readmission rates for patients at minority-serving hospitals.<sup>20,46</sup></p> <ul style="list-style-type: none"> <li>• Connect patients with community-based resources such as adult day health programs, personal care, home-delivered meals, and services that address social determinants of health (e.g., housing and food security, transportation, employment) and financial barriers that disproportionately affect racial and ethnic minorities.<sup>20,47</sup></li> <li>• Connect uninsured and underinsured patients with supplemental health insurance, when possible.<sup>48,49</sup></li> <li>• Encourage social support through community connections, use of health information technology, and community-based interventions that reduce social isolation and loneliness.<sup>43,50</sup></li> </ul>
Mental health	<p>Anxiety and depression disproportionately impact certain minority groups (e.g., black patients with heart failure), and poor mental health has been shown to affect access to services and self-care after discharge.<sup>51</sup></p> <ul style="list-style-type: none"> <li>• Assess patients for depression, assist them in accessing culturally competent mental health services, and support culturally-relevant coping mechanisms (e.g., spirituality, mindfulness). Stigma about diagnosis and variation in the cultural meaning of depression for minority populations may pose challenges to diagnosis and treatment.<sup>51</sup></li> </ul>

Topic	Key Issues and Recommended Strategies
Comorbidities	<p>Racial and ethnic minorities commonly have multiple comorbidities, resulting in higher readmission risk.</p> <ul style="list-style-type: none"><li>• Focus on the full spectrum of the patient’s health, not just the admitting diagnosis, especially for patients with multiple chronic conditions.<sup>52</sup></li><li>• Ensure appropriate referral to specialty care for comorbidities.<sup>53</sup></li><li>• Implement policies that foster the use of multi-disciplinary disease management teams and provide payment for care coordination.<sup>53</sup></li></ul>

## High Level Recommendations for Reducing Readmissions among Diverse Populations

Extensive research and guidance are available on how to prevent avoidable readmissions. Less information exists about barriers faced specifically by minority populations and how health systems are overcoming these challenges to address preventable readmissions in the overall population. However, there are several themes that emerge when examining factors that facilitate the prevention of readmissions for *all* patients, regardless of their race, ethnicity, culture, class, language proficiency, or level of health literacy. These include:

### 1. Collect Critical Data

Collecting data on who is readmitted, for what condition, from what location, due to what factors, and at what cost helps develop a better understanding of specific risk populations, settings, and individual characteristics and how they relate to readmissions. The more detailed the data, the better the foundation for interventions. As we consider addressing readmissions among diverse populations, tracking certain types of information is critical. These include:

- **Race and Ethnicity:** Racial and ethnic minority populations are more likely to be readmitted for chronic conditions than whites. Collection of standardized race and ethnicity data helps identify these groups. Self-reported data are considered most reliable.
- **Language:** Patients with limited-English proficiency are at higher risk for preventable readmission than English-speaking patients. Collect data on language by asking the patient's preferred spoken language for care, as well as preferred written language.
- **Education:** Patients with low health literacy are at risk for readmissions. Assessing patients' ability to understand health information and responding appropriately to patients' level of health literacy is essential.
- **Social Determinants:** Social supports, home and community-based services, access to healthy foods, safe housing, transportation, etc., are determinants of readmissions, and patients can be screened in clinical settings.
- **Disability:** People with disabilities have more complex admissions. Knowing this early on, and preparing accordingly, can help ensure appropriate care and a smooth transition after hospitalization.
- **Linkage to Primary Care/Usual Source of Care:** Minorities are less likely to be linked to a primary care provider or usual source of care, and this can affect readmissions. Gathering data on patients' providers helps identify which patients need referrals to primary care.

Information can be gathered routinely at registration, updated at regular intervals, and used to do predictive modeling for readmissions (also called readmission "hot spotting") to address factors that influence readmissions in diverse populations. In the absence of standardized data collection systems, this information can be gathered from individuals who are routinely readmitted via chart review, focus groups, structured interviews, and through multicultural advisory boards and/or patient/family councils. Data collection is an important foundation of addressing health care disparities, but difficulties collecting data should not preclude efforts to reduce readmissions. A comprehensive collection of resources and guidance to support data collection efforts is available in the *Compendium of Resources for Standardized Demographic and Language Data Collection* (<https://www.cms.gov/About-CMS/Agency-Information/OMH/Downloads/Data-Collection-Resources.pdf>).

### 2. Identify the Root Causes

Analyzing demographics and risk data enables the identification of root causes and characteristics associated with readmission. With this information, a process can be initiated to address barriers and develop systems to overcome or prevent them. Stratifying data and analyzing quality measures, such as 30-day readmission rates, by race, ethnicity, and language allows organizations to measure the equity of care provided. Presenting data clearly

and efficiently allows leadership to understand gaps in care. To support this process, the American Hospital Association offers a framework and guidance for collecting and stratifying race, ethnicity, and language data, including: assembling a disparities-focused working group; ensuring the quality and accuracy of race, ethnicity, and language data; identifying high-priority quality metrics; determining if stratification is possible; and stratifying the data.<sup>54</sup> This framework and related resources are available in the resource list at the end of this guide.

Systems innovations and improvement become natural next steps following the collection of demographic and risk data and identification of root causes. If it is determined that certain racial and ethnic groups are more likely to be readmitted, factors such as mistrust, different cultural beliefs, language barriers, or health literacy can be addressed through tailored interventions, including provider training, organizational trust-building, interpreter services, navigators, health coaches, and simpler discharge information, etc.

### **3. Start from the Beginning**

Create systems that assess risk prior to admission, and continue to address risk factors before, during, and after a hospital stay. Strategies implemented midway through a hospital stay or at discharge are rarely effective. Early intervention is especially important for minority populations because it may require more time to communicate effectively and to address patients' needs. Social and cultural factors, dietary patterns, language barriers, low health literacy, and social determinants all converge to create risk for readmission. Working to address potential issues before they emerge as problems is essential to reduce the risk of readmission. For example, hospitals may use data on the languages most commonly spoken in their service area or among their patient population to implement or improve systems that facilitate the use of interpreter services. Hospitals may also address risks associated with language barriers by training providers and staff on how to work effectively with professional medical interpreters. Building trust, bridging cross-cultural divides, and effectively educating all take time. The sooner this starts, the better.

### **4. Activate a Multidisciplinary Team**

The multifactorial risks involved in readmissions cannot be addressed solely by doctors, nurses, or social workers. Success requires a multidisciplinary team with clear leadership and roles that can communicate quickly, effectively, and respectfully with each other and with patients. Hospitals can create teams charged with the redesign of transitions or have existing teams focus their efforts on assuring best practices are incorporated into transition processes. Teams may include quality and safety leaders, doctors, nurses, and social workers. When caring for patients with limited English proficiency, professional medical interpreters should be considered as part of the multidisciplinary team. Many effective teams also include allied health professionals such as pharmacists, nutritionists, mental health providers, and substance abuse services and “non-traditional” team members such as community health workers, navigators, and health coaches. Investing in these resources will be essential. For example, hiring and training coaches and navigators who are multilingual, culturally competent, and familiar with the community will provide a leg up in anticipating and addressing barriers that lead to readmissions such as connecting patients to community resources. These team members need to be able to perform in both inpatient and outpatient setting.

### **5. Systematically Respond to Social Determinants**

Developing interventions to prevent readmissions, especially in vulnerable minority populations, requires focus in two areas— (1) creating systems responsive to the needs of diverse populations and (2) addressing the social determinants that put them at continued risk for readmissions. Identifying the specific social determinants that impact patients and their care processes is key to understanding how to support patients at greatest risk of readmission. Social determinants such as transportation to attend appointments; access to healthy, affordable foods; and housing status can be addressed with the support of navigators and links to community resources. Social isolation and a lack of social support are other key factors in readmission risk. Assuring that patients have the social supports and home and community-based services they need to manage their condition can be



assessed and addressed by social workers and community health workers. Hospitals should provide easy-to-read patient information that is culturally and linguistically appropriate and reinforced by a multidisciplinary inpatient team of educators and interpreters. In the end, a patient's ability to engage in their care is influenced by their clinical, physical, and emotional status; the support system available to them; and their capacity to overcome the social obstacles present in their lives and environment.

## **6. Focus on Providing Culturally Competent Communication**

Effective clinician-patient communication is directly linked to improved patient satisfaction, adherence, and health outcomes.<sup>55</sup> Communication is essential to the care process and to preventing avoidable readmissions. However, providers often have limited time to develop a personal connection with patients and ensure appropriate patient-provider communication during the inpatient stay. The goal of effective communication is patients' ability to understand three things: (1) their diagnosis and its implications for care, (2) care choices, including what requires attention, and (3) discharge instructions, including what signs and symptoms trigger a return visit, when to return for a routine follow-up, and how to take the prescribed medications.<sup>36</sup> Low health literacy, mistrust, or language barriers can influence a patient's understanding.<sup>36,56-59</sup> Patients from minority racial and ethnic backgrounds, as well as patients with disabilities, are often dissatisfied in their experiences with communicating with their clinicians.<sup>60,61</sup>

While providing culturally competent communication is essential at all times, communication in "high-risk scenarios," such as reconciling medications, explaining surgical procedures, and providing discharge instructions, is particularly important for preventing readmissions. Successful communication requires ensuring patients' understanding and ability to act on the instructions provided. These are considered communication-sensitive scenarios, meaning they rely on effective patient-provider communication to avoid harm.<sup>36</sup> Addressing these factors using culturally, linguistically, and educationally appropriate communication is a key element of strategy to prevent readmissions in minority populations. Examples of strategies include using interpreters at discharge, writing discharge instructions for a low literacy level and in languages other than English, and training staff on team communication, interpreter use, and cultural competency. For additional guidance on addressing communication challenges, refer to the resource list at the end of this guide, which includes tools on the teach-back method, cross-cultural communication, health literacy universal precautions, and providing safe care for patients with limited English proficiency.

## **7. Foster External Partnerships and Community Linkages to Promote Continuity of Care**

Reducing avoidable readmissions requires that hospitals build partnerships with other providers and the community to address social risk factors and promote continuous care when a patient is discharged from the hospital. Partnerships with community service providers can facilitate the transition of patients back into the community and ensure continuity of care for patients following hospitalization. Many hospitals already have relationships within their communities through community benefit activities associated with non-profit status. Hospitals may leverage and build on their community benefits activities and programs to address social determinants that lead to readmissions by connecting patients to community programs. For example, a referral to a community-based organization may ensure that a patient has transportation access for a follow-up visit post-discharge. This can be supported through informal or formal agreements with primary care providers and practices that promote data-sharing and cooperation. These are essential to maintaining the continuity of care. They will ensure that the next care provider is aware of the patient's status and care information. Community partners can direct at-risk patients to needed care following hospitalization. Community partners can also address other non-medical factors that could lead to readmissions such as issues related to social support, health literacy, and food and housing security. In addition, hospitals may benefit from developing or strengthening their relationship with public health officials. These partnerships can increase access to local level data to inform readmission reduction efforts. In places where these partnerships already exist, hospitals could focus on strengthening them.

## Conclusion

Our nation is becoming increasingly diverse, and as part of care redesign, hospitals should take steps to ensure that they are prepared to deliver high-value health care to a diverse patient population. Addressing disparities in readmissions is key to delivering on the promise of high-value care for all patients, families, and caregivers. To effectively address readmissions in diverse populations, hospitals should consider the strategies outlined in this report:

- Use data to identify disparities and the root causes of these disparities,
- Build multi-disciplinary teams to address the needs of diverse patients,
- Prepare to address social risk factors for readmissions,
- Tailor care to be culturally sensitive with a focus on effective communication, and
- Expand patient care beyond the four walls of the institution by linking and coordinating with community based organizations.

*Learn how to identify, prioritize, and take action on health disparities by championing the Disparities Action Statement in your organization. Participants receive personalized technical assistance focused on strengthening your quality improvement program through a series of consultations from subject matter experts. To learn more, contact [HealthEquityTA@cms.hhs.gov](mailto:HealthEquityTA@cms.hhs.gov).*

## Resources for Reducing Readmissions among Diverse Populations

This table offers resources, tools, and further guidance for implementing the high-level recommendations in the guide which are numbered below. This list also includes resources for securing leadership buy-in and promoting the organizational change necessary to support and sustain readmission reduction efforts for diverse populations.

1	2	3	4	5	6	7	8
Collect Critical Data	Identify Root Causes	Start from the Beginning	Activate a Multidisciplinary Team	Systematically Respond to Social Determinants	Focus on Providing Culturally Competent Communication	Foster External Partnerships and Community Linkages to Promote Continuity of Care	Secure Leadership Buy-in and Promote Organizational Change

Resources	Recommendations							
<a href="#">Race, Ethnicity, and Language Data: Standardization for Healthcare Quality Improvement</a> <b>Source:</b> Institute of Medicine	1							
<a href="#">Reducing Health Care Disparities: Collection and Use of Race, Ethnicity, and Language Data</a> <b>Source:</b> American Hospital Association, Equity of Care	1							
<a href="#">Ask Every Patient REAL: Interactive Course on Race, Ethnicity, and Language</a> <b>Source:</b> America's Essential Hospitals	1							

Resources		Recommendations						
<a href="#">A Framework for Stratifying Race, Ethnicity, and Language Data</a>	1	2						
<b>Source:</b> American Hospital Association, Equity of Care								
<a href="#">HRET Disparities Toolkit</a>	1	2						
<b>Source:</b> Health Research and Educational Trust								
<a href="#">Creating Equity Reports: A Guide for Hospitals</a>	1	2						
<b>Source:</b> The Disparities Solutions Center, Massachusetts General Hospital								
<a href="#">Tools to Address Disparities in Health: Data as Building Blocks for Change</a>	1	2						
<b>Source:</b> America's Health Insurance Plans								
<a href="#">Health Disparities Measurement</a>	1	2	3					
<b>Source:</b> The Disparities Solutions Center, Massachusetts General Hospital								
<a href="#">Improving Health Equity through Data Collection and Use: A Guide for Hospital Leaders</a>	1	2	3				7	8
<b>Source:</b> The American Hospital Association								
<a href="#">Building an Organizational Response to Health Disparities</a>	1	2	3	4				8
<b>Source:</b> Centers for Medicare & Medicaid Services								



Resources			Recommendations					
<a href="#">Implementing Multicultural Health Care Standards: Ideas and Examples</a> <b>Source:</b> National Committee for Quality Assurance	1	2				6		
<a href="#">A Leadership Resource for Patient and Family Engagement Strategies</a> <b>Source:</b> American Hospital Association				4			7	8
<a href="#">Building a Culturally Competent Organization: The Quest for Equity in Health Care</a> <b>Source:</b> American Hospital Association, Equity of Care	1	2		4		6	7	
<a href="#">Capturing Social and Behavioral Domains and Measures in Electronic Medical Records: Phase 2</a> <b>Source:</b> Institute of Medicine	1	2	3		5			
<a href="#">Compendium of Resources for Standardized Demographic and Language Data Collection</a> <b>Source:</b> Centers for Medicare & Medicaid Services	1	2	3		5			
<a href="#">Equity of Care: A Toolkit for Eliminating Health Care Disparities</a> <b>Source:</b> The American Hospital Association	1	2	3	4		6	7	8
<a href="#">Guide to Patient and Family Engagement in Hospital Quality and Safety</a> <b>Source:</b> Agency for Healthcare Research and Quality			3			6		

Resources			Recommendations					
<a href="#">Healthcare Disparities and Cultural Competency Consensus Standards</a>			3			6		
<b>Source:</b> National Quality Forum								
<a href="#">LACE Index Scoring Tool</a>			3					
<b>Source:</b> Ottawa Hospital Research Institute								
<a href="#">International Validity of the HOSPITAL Score to Predict 30-Day Potentially Avoidable Hospital Readmissions</a>			3					
<b>Source:</b> Jacques D. Donzé, MD, MSc; Mark V. Williams, MD; Edmondo J. Robinson, MD, MBA, MSHP.								
<a href="#">Making CLAS Happen: Chapter 3 – Collect Diversity Data</a>	1					6	7	
<b>Source:</b> Massachusetts Department of Public Health, Office of Health Equity								
<a href="#">National Standards for Culturally and Linguistically Appropriate Services in Health and Healthcare: A Blueprint for Advancing and Sustaining CLAS Policy and Practice</a>	1			4		6	7	
<b>Source:</b> Office of Minority Health, U.S. Department of Health and Human Services								
<a href="#">Multicultural Health Care: A Quality Improvement Guide</a>	1	2	3	4		6	7	
<b>Source:</b> National Committee for Quality Assurance								

Resources		Recommendations						
<a href="#">Re-Engineered Discharge (RED) Toolkit</a>			3	4		6		
<b>Source:</b> Agency for Healthcare Research and Quality								
<a href="#">Risk Assessment – 8P Project Boost Implementation Toolkit</a>			3			6		
<b>Source:</b> Society of Hospital Medicine								
<a href="#">PRAPARE (Protocol for Responding to and Assessing Patient Assets, Risks, and Experiences)</a>			3		5			
<b>Source:</b> National Association of Community Health Centers								
<a href="#">A Framework for Educating Health Professionals to Address the Social Determinants of Health</a>			3		5		7	
<b>Source:</b> National Academy of Sciences								
<a href="#">Social Needs Screening Toolkit</a>					5			
<b>Source:</b> Health Leads								
<a href="#">Tools for Putting Social Determinants of Health into Action</a>					5			
<b>Source:</b> Centers for Disease Control								
<a href="#">Compendium of State-Sponsored National CLAS Standards Implementation Activities Tracking CLAS Tool</a>						6		
<b>Source:</b> U.S. Department of Health and Human Services, Office of Minority Health								

Resources					Recommendations			
<a href="#">Cross-Cultural Care and Communication</a> (Online Only)  <b>Source:</b> Up-to-Date, Joseph R. Betancourt, Alexander Green, and J. Emilio Carrillo						6		
<a href="#">The SHARE Approach: Using the Teach-Back Technique: A Reference Guide for Healthcare Providers</a>  <b>Source:</b> Agency for Healthcare Research and Quality						6		
<a href="#">The SHARE Approach – 5 Essential Steps of Shared Decision Making</a>  <b>Source:</b> Agency for Healthcare Research and Quality						6		
<a href="#">AHRQ Health Literacy Universal Precautions Toolkit, 2<sup>nd</sup> Ed</a>  <b>Source:</b> Agency for Healthcare Research and Quality						6		
<a href="#">Health Literacy Universal Precautions Toolkit, 2<sup>nd</sup> Edition (Tool # 5, Teach-Back method)</a>  <b>Source:</b> Agency for Healthcare Research and Quality						6		
<a href="#">The Teach Back Method</a>  <b>Source:</b> NC Program on Health Literacy						6		
<a href="#">Always Use Teach-back! Training Toolkit</a>  <b>Source:</b> Always Use Teach-back!						6		



Resources					Recommendations			
<a href="#">Improving Patient Safety Systems for Patients with Limited English Proficiency: A Guide for Hospitals and Team STEPPS Enhancing Safety For Patients with Limited English Proficiency Module</a>  <b>Source:</b> The Disparities Solutions Center, ARHQ						6		8
<a href="#">8-Step Process for Leading Change</a>  <b>Source:</b> John Kotter, Kotter International								8
<a href="#">Improving Quality and Achieving Equity: A Guide for Hospital Leaders</a>  <b>Source:</b> The Disparities Solutions Center, Massachusetts General Hospital								8

## Appendix A: Disparities in Top Conditions in CMS Hospital Readmissions Reduction Program

The table below provides an overview of the epidemiology of the top conditions in the CMS Hospital Readmission Reduction Program, as well as racial and ethnic disparities for each condition, the 30-day readmission rate, disparities in readmission rates, and the estimated cost associated with excess readmissions among Medicare beneficiaries overall. The annual cost of readmissions is \$26 billion, and potentially avoidable readmissions account for an estimated \$17 billion of that cost.<sup>2</sup>

Condition	Overall U.S. Prevalence	Racial and Ethnic Disparities by Condition*	Overall 30-Day Readmission Rate	Racial and Ethnic Disparities in 30-Day Readmission Rates*	Total cost of all-cause, 30-Day Readmissions
Congestive Heart Failure (CHF)	6.5 million U.S. adults $\geq 20$ years <sup>62</sup>	Highest incidence rate among African Americans and Hispanics (4.6 and 3.5 per 1,000 person years, respectively, compared with 2.4 among whites). <sup>63</sup>  The higher incidence of CHF among African Americans is related to differences in the prevalence of hypertension and diabetes, as well as socioeconomic status. Lack of insurance was not found to be a significant contributor. <sup>63</sup>	22.7% <sup>64</sup>	A 2011 study found higher readmission rates among black patients, with highest rates among black patients treated at minority-serving institutions. <sup>7</sup>  A study of Medicare Provider Analysis Review data from 2006-2008 found higher readmission rates among Hispanics. Higher readmission rates were also found at Hispanic-serving hospitals. <sup>18</sup>  A recent study found that foreign-born patients with LEP had higher risk of readmission, independent of clinical factors and race and ethnicity. <sup>37</sup>  Hospitals serving the highest proportion of African American Medicare fee-for-service patients had a higher heart failure readmission rate than hospitals serving the lowest proportion of African American patients. <sup>19</sup>	\$1.7 billion <sup>65</sup>

Condition	Overall U.S. Prevalence	Racial and Ethnic Disparities by Condition*	Overall 30-Day Readmission Rate	Racial and Ethnic Disparities in 30-Day Readmission Rates*	Total cost of all-cause, 30-Day Readmissions
Acute Myocardial Infarction (AMI)	7.6 million (2.8% of U.S. adults $\geq$ 20 years) <sup>66</sup>	<p>In 2014, prevalence for AMI was 5.9 percent in whites, 5.6 percent in African Americans, and 5.2 percent in Mexican Americans.<sup>66</sup></p> <p>A 2009 study found that blacks had a higher mortality rate and worse quality of life after MI. These differences did not persist after adjusting for patient factors and site of care.<sup>67</sup></p> <p>A 2014 study found that older blacks with AMI initially exhibited lower mortality rates, but higher mortality rates long term. This increase in mortality rate may be due to differences in post-discharge care or comorbidities.<sup>68</sup></p>	17.8% <sup>69</sup>	<p>A 2011 study found higher readmission rates among black patients, with highest rates among black patients treated at minority-serving institutions.<sup>7</sup></p> <p>A study of Medicare Provider Analysis Review data from 2006-2008 found higher readmission rates among Hispanics. Higher readmission rates were also found at Hispanic-serving hospitals.<sup>18</sup></p> <p>Hospitals serving the highest proportion of African American Medicare fee-for-service patients had a higher AMI readmission rate than hospitals serving the lowest proportion of African American patients.<sup>19</sup></p>	\$693 million <sup>66</sup>
Pneumonia	1.1 million hospital discharges in 2010 <sup>70</sup> (In the absence of ongoing surveillance of pneumonia cases, hospital discharges are used as an indicator for estimating prevalence)	<p>From 2003 to 2004, the average annual incidence of bacteremic pneumonia was 24.2 episodes per 100,000 black adults versus 10.1 per 100,000 white adults.<sup>71</sup></p> <p>Among Medicare beneficiaries in 2010, 49 percent of African American and 39 percent of Hispanic Medicare beneficiaries reported receiving a pneumonia vaccine compared with 65 percent of whites. Low immunization rates may be attributed to cultural and linguistic barriers, lack of awareness, and distrust of immunizations.<sup>72</sup></p> <p>On average blacks are 37 percent less likely and Hispanics are 46 percent less likely to be vaccinated against pneumonia than whites.<sup>73</sup></p> <p>In a 2009 study, African American and Hispanic patients were less likely to receive pneumonia and influenza vaccinations, smoking cessation counseling, and antibiotics within four hours than white patients.<sup>74</sup></p>	17.3% <sup>85</sup>	<p>A 2011 study found higher readmission rates among black patients, with highest rates among black patients treated at minority-serving institutions.<sup>7</sup></p> <p>Hospitals serving the highest proportion of African American Medicare fee-for-service patients had a higher median pneumonia readmission rate than hospitals serving the lowest proportion of African American patients.<sup>19</sup></p>	\$1.1 billion <sup>66</sup>

Condition	Overall U.S. Prevalence	Racial and Ethnic Disparities by Condition*	Overall 30-Day Readmission Rate	Racial and Ethnic Disparities in 30-Day Readmission Rates*	Total cost of all-cause, 30-Day Readmissions
Chronic Obstructive Pulmonary Disease (COPD)	13.7 million (6.5% of adults $\geq$ 25years) <sup>75</sup>	<p>Highest incidence rate among American Indian/Alaska Natives (11%), followed by whites (6.9%), blacks (6.5%), Hispanics (4.1%), and Asian/Pacific Islanders (2.5%) <sup>75</sup></p> <p>In a 2009 study, African American patients used 17 percent fewer medical services, 18 percent less outpatient services, and 15 percent less inpatient services for COPD than white patients. Other races were 26 percent less likely to use outpatient services than white patients.<sup>76</sup></p>	20.7% <sup>65</sup>	<p>African Americans hospitalized with COPD have a higher 30-day readmission rate compared with white patients (23.1% vs. 20.5%).<sup>20</sup></p> <p>Among Medicare beneficiaries, readmission rates are highest for African Americans at minority-serving institutions (26%) and lowest for whites at non-minority-serving institutions (21%) <sup>20</sup></p> <p>In 2008, black patients were readmitted at higher rates (8%) than whites (7.2%), Hispanics (6.1%), and Asian/Pacific Islanders (6.1%).<sup>21</sup></p> <p>Hospitals serving the highest proportion of African American Medicare fee-for-service patients had a higher median COPD readmission rate than hospitals serving the lowest proportion of African American patients.<sup>19</sup></p>	\$924 million <sup>66</sup>
Total Hip Arthroplasty (THA) Total Knee Arthroplasty (TKA)	<p>22.7 million (9.8% of adults <math>\geq</math> 18 years) have arthritis and arthritis-related limitations, for which THA/TKA is a treatment option.<sup>77</sup></p> <p>TKA: 6.7 million (6.7% of adults <math>\geq</math> 50 years)</p> <p>THA: 4.5 million (4.4% of adults <math>\geq</math> 50 years) <sup>78</sup></p>	<p>Higher prevalence of osteoarthritis (OA) among African Americans and Hispanics than whites, but African Americans and Hispanics report OA-related total joint arthroplasty 2/3 less frequently than whites.<sup>44,79</sup></p> <p>Disparities between black and white patients in primary and revision TKA and THA persisted or worsened from 1991-2008. In 2008, utilization of primary TKA was 40 percent lower for blacks than whites (41.5 per 10,000 vs. 68.8 per 10,000, respectively).<sup>22</sup></p> <p>Black patients experience longer length of stay (LOS) and are less likely to be discharged home.<sup>22</sup></p>	<p>5.2%<sup>65</sup></p> <p>TKA: 2.4%</p> <p>rTKA: 11.9%</p> <p>THA: 2.4%</p> <p>rTHA: 9.5%<sup>80</sup></p>	<p>2006-2008 Medicare data show higher readmission rates for African Americans than whites:</p> <ul style="list-style-type: none"> <li>• TKA (8.8% vs. 6.7%)</li> <li>• rTKA (13.6% vs. 11.2%)</li> <li>• THA (9.0% vs. 7.6%)</li> <li>• rTHA (17.1% vs. 14.5%)<sup>22</sup></li> </ul> <p>Hospitals serving the highest proportion of African American Medicare fee-for-service patients had a higher THA/TKA readmission rate than hospitals serving the lowest proportion of African American patients.<sup>19</sup></p>	Data not available

\*Compared to non-Hispanic whites unless otherwise indicated



## Appendix B: Disparities in Top Chronic Conditions

The table below provides an overview of the epidemiology of the three top chronic conditions prioritized by CMS OMH, as well as racial and ethnic disparities for each condition, the 30-day readmission rate, disparities in readmission rates, and (where available) the estimated cost associated with excess readmissions among Medicare beneficiaries overall.

Condition	Overall U.S. Prevalence	Racial and Ethnic Disparities by Condition*	Overall 30-Day Readmission Rate	Racial and Ethnic Disparities in 30-Day Readmission Rates*	Total cost of all-cause, 30-Day readmissions
Diabetes	29.1 million (9.3% of U.S. population) <sup>81</sup>	<p>Highest incidence rate among American Indian/Alaska Natives (15.9%), followed by Non-Hispanic blacks (13.2%), Hispanic Americans (12.8%), Asian Americans (9.0%), and whites (7.6%)<sup>81</sup></p> <p>Hispanics, African Americans, and American Indian/Alaska Natives are all more than twice as likely as non-Hispanic white adults to die from diabetes.<sup>82-84</sup></p> <p>African Americans are also more likely to have lower extremity amputations.<sup>82</sup></p>	20.3% <sup>85</sup>	<p>A 2013 study found that African Americans were as likely as white patients to be readmitted within 30-days, but more likely to be readmitted within 180-days of discharge.<sup>86</sup></p> <p>A 2010 study showed that patients with unscheduled readmissions within 90 days of discharge were more likely to be ethnic minorities.<sup>87</sup></p>	251 million <sup>66</sup>
End Stage Renal Disease (ESRD)	636,905 (0.19% of U.S. population) <sup>88</sup>	<p>African Americans are nearly 3.5 times more likely to develop ESRD than whites.<sup>89</sup></p> <p>Hispanics are nearly 1.5 times more likely to develop ESRD than whites.<sup>89</sup></p> <p>Native Americans are 1.3 times more likely to develop ESRD than whites.<sup>85</sup></p>	35.2% <sup>88</sup>	The US Renal Data System 2014 Annual Data Report indicates that blacks/African Americans have a higher rate of rehospitalization within 30 days (38%) when compared with whites (36%). <sup>88</sup>	Data not available

Condition	Overall U.S. Prevalence	Racial and Ethnic Disparities by Condition*	Overall 30-Day Readmission Rate	Racial and Ethnic Disparities in 30-Day Readmission Rates*	Total cost of all-cause, 30-Day readmissions
Chronic Kidney Disease (CKD)**	31 million (10% of U.S. population) <sup>90</sup>	<p>CKD prevalence is greatest in non-Hispanic blacks (17.0%), followed by non-Hispanic whites (14%).<sup>91</sup></p> <p>(This only includes prevalence data for stage 1 – 4 of CKD. Does not include stage 5 (ESRD) data.)</p> <p>Blacks/African Americans are three times more likely than white Americans to develop kidney failure due to high rates of diabetes and high blood pressure.<sup>92</sup></p> <p>(May include prevalence data for all five stages of CKD.)</p>	24% <sup>88</sup>	<p>The US Renal Data System 2014 Annual Data Report indicates that black/African American CKD patients have higher overall rates of 30-day readmission for CKD (26.2%) when compared with white patients (23.8%).<sup>88</sup></p> <p>A 2012 study found that African Americans were more likely to be readmitted within 30-days of kidney transplantation.<sup>93</sup></p>	Data not available

\*Compared to non-Hispanic whites unless otherwise indicated; \*\* As End Stage Renal Disease is stage 5 of Chronic Kidney Disease, CKD statistics may include ESRD data.

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## Racial Disparities in Knee and Hip Total Joint Arthroplasty: An 18-year Analysis of National Medicare Data

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### Abstract

**Objective**—Examine whether racial disparities in utilization and outcomes of total knee and total hip arthroplasty (TKA and THA) have declined over time.

**Methods**—We used 1991-2008 Medicare Part A (MedPAR) data to identify four separate cohorts of patients (primary TKA, revision TKA, primary THA, revision THA). For each cohort, we calculated standardized arthroplasty utilization rates for White and Black Medicare beneficiaries for each calendar year and examined changes in disparities over time. We examined unadjusted and adjusted arthroplasty outcomes (30-day readmission rate, discharge disposition etc.) for Whites and Blacks and whether disparities decreased over time.

**Results**—In 1991 utilization of primary TKA was 36% lower for Blacks compared to Whites (20.6 per 10,000 for Blacks; 32.1 per 10,000 for Whites;  $p < 0.0001$ ); in 2008 utilization of primary TKA for Blacks was 40% lower for Blacks (41.5 per 10,000 for Blacks; 68.8 per 10,000 for Whites;  $p < 0.0001$ ) with similar findings for the other cohorts. Black-White disparities in 30-day hospital readmission increased significantly from 1991-2008 among three patient cohorts. For example in 1991 30-day readmission rates for Blacks receiving primary TKA were 6% higher than for Whites; by 2008 readmission rates for Blacks were 24% higher ( $p < 0.05$  for change in disparity). Similarly, Black-White disparities in the proportion of patients discharged-to-home after surgery increased across the study period for all cohorts ( $p < 0.05$ ).

**Conflict of Interest:** JAS has received investigator-initiated research grants from Takeda and Savient; consultant fees from URL pharmaceuticals, Takeda, Ardea, Savient, Allergan and Novartis; and is a member of the executive of OMERACT, an organization that develops outcome measures in rheumatology and receives arms-length funding from 36 companies. Dr. Singh is also a member of the American College of Rheumatology's Guidelines Subcommittee of the Quality of Care Committee and Veterans Affairs Rheumatology Field Advisory Committee. Dr. Cram, Dr. Ibrahim and Xin Lu have no conflicts to disclose.



**Conclusions**—In an 18-year analysis of Medicare data we found little evidence of declines in racial disparities for joint arthroplasty utilization or outcomes.

## Introduction

Total knee arthroplasty (TKA) and total hip arthroplasty (THA) are two of the most common major surgical procedures performed in the United States (U.S.) with an estimated 670,000 TKA and 427,000 THA procedures performed in 2009 annually according to the Healthcare Cost and Utilization Project.<sup>1</sup> Moreover, the utilization of these procedures has increased by 10%-20% per-year over the past decade garnering attention from both researchers and policy makers.<sup>2-6</sup>

Prior analyses have demonstrated racial disparities for both TKA and THA with Blacks having reduced utilization and higher complication rates as compared to Whites.<sup>7-9</sup> However, many of these studies were conducted within discrete healthcare systems at a single point-in-time<sup>7,8</sup> and few have examined whether disparities in utilization and outcomes have declined over time. In a landmark study published in *NEJM* in 2005 Jha et al. found that racial disparities in joint arthroplasty utilization had increased between 1992 and 2001.<sup>10</sup> However, updated analyses using more contemporary data have not been conducted and their analysis did not examine disparities in arthroplasty outcomes.

The lack of contemporary data evaluating trends in racial disparities for joint arthroplasty is particularly important given the myriad of publications, reports, and directives that have been issued over the past decade in an effort to both draw attention to and reduce racial disparities.<sup>9,11,12</sup> For example, the National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS)<sup>13</sup> and the American Academy of Orthopaedic Surgeons<sup>14</sup> have made arthroplasty disparities a major priority for investigation and action.

The overarching objective of our study was to examine longitudinal trends in racial disparities in primary and revision TKA and THA. Specifically, we set out to examine whether the disparities in TKA and THA utilization and outcomes that have been documented previously have decreased over the past 18-years. We hypothesized that racial disparities in joint arthroplasty utilization rates and outcomes have narrowed over time.

## Methods

### Data

We used Medicare Provider Analysis and Review (MedPAR) Part A data files to identify fee-for-service beneficiaries who underwent primary or revision TKA or THA between 1991 and 2008. Patients were identified using International Classification of Diseases, Ninth Revision, Clinical Modification (ICD9-CM) procedure codes: 81.54 for primary TKA; 80.06, 81.55, 00.80, 00.81, 00.82, 00.83, 00.84 for revision TKA; 81.51 for primary THA; and 80.05, 81.53, 00.70, 00.71, 00.72, 00.73 for revision THA.<sup>15-18</sup> The Part A files contain data collected from discharge abstracts for all hospitalized fee-for-service Medicare enrollees including: patient demographics (age, sex, race/ethnicity); ICD9-CM codes for primary and secondary diagnoses and procedures (for index admission and subsequent

admissions); admission source (e.g., emergency department or transfer from outside hospital); admission and discharge dates; discharge disposition (e.g., home, nursing home, transfer to another acute-care hospital, dead); death occurring up to three years after discharge; each patient's unique Medicare beneficiary number allowing for identification of patient readmissions; and each hospital's unique six digit identification number.

We limited our cohort to patients whose race was categorized as either Non-Hispanic White or Black; patients whose race was listed as unknown or missing were excluded. Likewise, we excluded patients with other racial categories (e.g., Native American, Asian/Pacific Islander, and Hispanic). We focused our analysis on blacks and whites for several reasons: First, prior studies have shown that Black/White racial designation to be more reliable than other ethnic or racial designations. Second, most recent studies that examined this disparity have focused on black and white patients. Lastly, the representation of other racial/ethnic groups in our sample was less robust, particularly in the early 1990s.<sup>19</sup>

Consistent with prior studies in this area, we applied separate exclusion criteria to the primary and revision populations.<sup>20-22</sup> Primary TKA and THA are most often elective procedures while revision TKA and THA can be either elective or non-elective. To insure a cohort of primary elective TKA and THA procedures, we excluded patients with codes indicating infection at the time of surgery (N=4517 for TKA, 6250 for THA), bone or metastatic cancer (N=3101 for TKA, 13794 for THA), or fracture (N=4603 for TKA, 127102 for THA), patients admitted through the emergency department (N=14343 for TKA, 14851 for THA), and patients admitted after transfer from another acute-care hospital (N=2590 for TKA, 2248 for THA)(Appendix 1). These exclusions were not applied to the revision TKA and THA populations because revision procedures are commonly non-elective and exclusion of emergent procedures would not make sense from a clinical standpoint.

For each hospital admission (primary or revision TKA or THA), we identified comorbid conditions using algorithms described by Elixhauser et al.<sup>23,24</sup> We also calculated the mean number of comorbid conditions for each patient as an aggregate measure of comorbidity. We assessed key outcomes for each admission including: hospital length-of-stay (LOS); mortality within 30-days of discharge; readmission within 30-days of discharge; discharge disposition (categorized as home versus other); and the occurrence of a composite outcome representing readmission for one-or-more of six key complications within 30-days of discharge (infection, hemorrhage, myocardial infarction, sepsis, deep vein thrombosis, or pulmonary embolism). For this analysis, we used algorithms that we and others have published previously.<sup>20-22</sup>

### Statistical Analysis

We compared demographic and clinical characteristics of White and Black patients who underwent primary or revision TKA or THA between 1991 and 2008. We used analysis of variance (ANOVA) for comparisons of continuous variables and the chi-squared test for categorical variables. All analyses were performed separately for primary TKA, revision TKA, primary THA and revision THA. We then calculated age- and sex-standardized utilization rates for Whites and Blacks for each of the four cohorts for each calendar year. Utilization rates were calculated as the number of each procedure performed for Whites and

Blacks divided by the number of fee-for-service White (or Black) Medicare enrollees. We used graphical methods to plot the trends in utilization over time for White and Black Medicare enrollees and compared Black-White differences in utilization using logistic regression. Changes in the magnitude of disparities in utilization over time were assessed in each cohort using an interaction term between race and calendar year and P-values of  $<0.05$  were construed as evidence of a significant interaction.

We used similar methods to examine trends in several distinct unadjusted arthroplasty outcomes among Whites and Blacks over the study period. These included hospital LOS; 30-day mortality; hospital readmission within 30-days of discharge; occurrence of the composite outcome; and discharge-to-home after hospitalization. We compared changes in the unadjusted Black-White differences for each of these outcomes between 1991 and 2008 using Cochran-Mantel-Haenszel statistics. Finally, we examined trends in risk-adjusted 30-day mortality using logistic regression models with generalized estimating equations (GEE) to account for clustering of patients within hospitals. These models adjusted for age, sex, hospital arthroplasty volume, and comorbidity; changes in disparities were again assessed using interaction terms for each model. Details of the models are available on request.

To insure the robustness of our findings, we conducted an array of sensitivity analyses. First, we added back excluded populations to our primary TKA and THA groups and repeated our analyses. Second, we conducted adjusted analyses for each of the principle outcomes described above. Third, we examined each of the outcomes included in our composite measure individually for each of our four cohorts. All analyses were performed using SAS Version 9.2 (Cary, NC). This study was approved by the University of Iowa Institutional Review Board.

## Results

### Baseline sample characteristics

Our analytic sample included, 2,684,575 primary TKAs and 267,644 revision TKAs and 1,328,902 primary THAs and 317,408 revision THAs performed between 1991 and 2008 (**Appendix 1**). Demographic and clinical characteristics of the primary and revision TKA and THA populations are shown in **Tables 1** and **2**. Compared to White patients, Black patients undergoing both primary and revision TKA were younger, more likely to be women and had significantly more comorbidities (**Table 1**). Similar differences were observed for primary and revision THA (**Table 2**).

### Utilization Rates for Primary and Revision TKA and THA

Standardized utilization rates for both primary and revision TKA were significantly lower for Blacks when compared to Whites throughout the study period (**Figure 1**); results were similar for primary and revision THA (**Figure 2**). For example, in 1991 utilization of primary TKA was 35.8% lower for Blacks compared to Whites (20.6 per 10,000 for Blacks; 32.1 per 10,000 for Whites;  $p<0.0001$ ); in 2008 utilization of primary TKA for Blacks was 39.7% lower for Blacks (41.5 per 10,000 for Blacks; 68.8 per 10,000 for Whites;  $p<0.0001$ ). Over the 18-year study period the magnitude of the Black-White disparity increased for

primary TKA utilization by 15.8% ( $p<0.001$ ), was unchanged for primary THA ( $p=0.25$ ) and revision THA ( $p=0.94$ ) and decreased modestly (by 12.8%) for revision TKA ( $p<0.01$ ).

### TKA and THA Outcomes

In unadjusted analyses for primary and revision TKA Blacks experienced worse outcomes than Whites according to most measures throughout the study period (**Table 3**). In particular, Blacks had longer hospital LOS, higher all-cause hospital readmission rates, higher rates of the composite outcome, and were significantly less likely to be discharged to home (**Table 3**). Thirty-day mortality was higher in Blacks compared to Whites for primary TKA, but not revision TKA (**Table 3**).

In unadjusted analyses, there was substantial variability in the magnitude of change in Black-White disparities for primary and revision TKA over the study period depending upon the outcome under consideration (**Table 3**). For example, in 1991 Blacks were 3.5% less likely than Whites to be discharged to home following revision TKA, but 20.7% less likely to be discharged home in 2008 ( $p<0.001$  for change in disparity). Unadjusted analyses focusing on primary and revision THA yielded similar results (**Table 4**). Black-White disparities in 30-day hospital readmission increased significantly from 1991-2008 among three of the study cohorts, namely, primary TKA, 6% to 24%, revision TKA, -6% to 18% and revision THA, 5% to 15% (all three  $p$ -values  $<0.05$ ), but not primary THA, 9% to 15% ( $p=0.09$ ). Alternatively, looking at length of hospital stay, in 1991 hospital LOS for Blacks after primary TKA was 18.1% higher than for Whites, but was only 8% higher for Blacks in 2008 ( $p<0.001$  for change in disparity).

In adjusted analyses, we found that the Black-White disparity for 30-day mortality for primary and revision TKA remained largely unchanged (**Figure 3**). For example, in 1991 for primary TKA the adjusted 30-day mortality for Whites was 0.2% and for Blacks was 0.3% while in 2008 the rates were 0.1% and 0.2% for Whites and Blacks respectively; thus, the magnitude of the Black-White disparity was statistically unchanged between 1991 and 2008 ( $p$ -value for interaction term=0.81). In adjusted analyses focusing on mortality following primary and revision THA, we again found no consistent evidence for reductions in Black-White disparities. For example, we found that for primary THA the Black-White disparity for 30-day mortality decreased by 0.3% between 1991 and 2008 ( $p<0.01$ ) while the disparity in 30-day mortality for revision THA increased by a statistically insignificant 0.1% ( $p=0.76$ ). Results of the sensitivity analyses for each of our outcomes for each of the study cohorts failed to demonstrate evidence of declines in disparities over the study period. These results are available by request.

### Discussion

In a longitudinal analysis of Medicare administrative data from 1991 to 2008 we found persistent disparities in joint arthroplasty utilization and outcomes. We found that Blacks had significantly lower utilization rates for primary and revision knee and hip arthroplasty compared to Whites and that these disparities persisted over our 18-year study period. We also found that Blacks had significantly worse outcomes by most measures (e.g., readmission rates, ability to be discharged to home) when compared with Whites and that



disparities in outcomes did not decline substantially over time. In aggregate, these results suggest little progress in reducing Black-White disparities for joint arthroplasty over the past 18-years.

A number of prior studies have demonstrated racial disparities in joint arthroplasty utilization with Blacks being less likely to receive surgery as compared to Whites, but none of these studies examined whether disparities in utilization declined over time.<sup>9,25-27</sup> The notable exception was a 2005 landmark paper by Jha et. al.,<sup>10</sup> that found little evidence of reductions in Black-White disparities in the utilization of nine surgical procedures between 1992 and 2001 including TKA and THA. Our analysis builds on the prior analysis in a number of important ways.<sup>28</sup> First, our analysis extends the prior study by demonstrating persistence of disparities in arthroplasty utilization over an 18-year period. Second, our analysis documents not only persistent disparities in arthroplasty utilization but also persistent disparities in arthroplasty outcomes.

As with prior studies, we observed that Blacks experienced inferior arthroplasty outcomes when compared to whites.<sup>8,29-31</sup> Specifically, we found that Whites tended to have a shorter hospital LOS, were more likely to be discharged home after hospitalization, and had lower rates of hospital readmission. As with the disparities in joint arthroplasty utilization, we found little evidence that disparities in arthroplasty outcomes have declined over time. While we did observe a significant decline in certain disparities (most notably hospital LOS), we saw no decline in other disparities (e.g., mortality) and increases in others (hospital readmission, discharge to home).

The combination of longer hospital LOS for Blacks accompanied by a reduced probability of being discharged to home is thought provoking. It is possible that Blacks experience more in-hospital complications and thus have both longer hospital LOS and are more likely to require admission to rehabilitation facilities after hospital discharge. Alternatively, it is possible that the longer LOS reflects patient preference while lower probability of being discharged home reflects reduced social support for Blacks when compared to Whites<sup>32,3334</sup> or lower rates of functional improvement during and after hospitalization in Blacks compared to Whites.<sup>35</sup> Further research is needed to address these issues.

The lack of a reduction in disparities in either utilization or outcomes over an 18-year period is sobering. It is possible that the lack of reduction we observed is unique to joint arthroplasty and that disparities in utilization and outcomes have declined more substantially in other areas of healthcare.<sup>36,37</sup> Alternatively, we believe it to be more likely that the lack of a reduction in disparities that we observed extends to other areas of healthcare.<sup>38,39</sup> It is increasingly apparent that while broad-based policy briefs and consensus statements disavowing disparities are symbolically important<sup>11,13,14,40</sup> they are insufficient to meaningfully reduce disparities on their own.<sup>41</sup> Conversely, there is growing evidence that disparities can be reduced at the local level<sup>42</sup> when carefully targeted at a single disease and when interventions are tailored to address the particular barriers in a community.<sup>43-45</sup> It is also important to recognize that our finding of a lack of meaningful reductions in arthroplasty disparities over the past 18-years at a national level should not be interpreted as evidence of a lack of reductions in disparities in all communities. In fact, it is nearly certain

that disparities declined in certain communities, but increased in others. This too is an important area for further research.

Our study has a number of limitations that warrant brief mention. First, our study was limited to White and Black fee-for-service Medicare beneficiaries; extrapolation to other populations should be done with caution. Second, our study relied upon administrative data and thus we were unable to evaluate key arthroplasty outcomes including quality-of-life and functional status. Third, in using administrative data, our results could be biased by unmeasured differences in patient complexity.

In aggregate we found little evidence of reductions in racial disparities for knee and hip arthroplasty between 1991 and 2008. Our results highlight the need for better understanding of disparities and call into question the success of policies designed to reduce disparities over the past two decades.

## Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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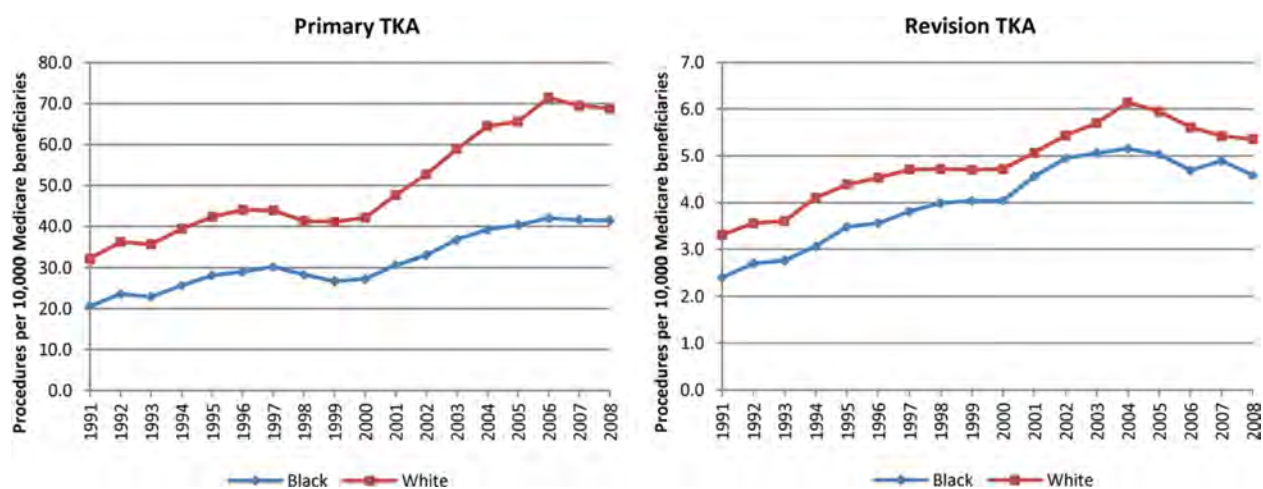
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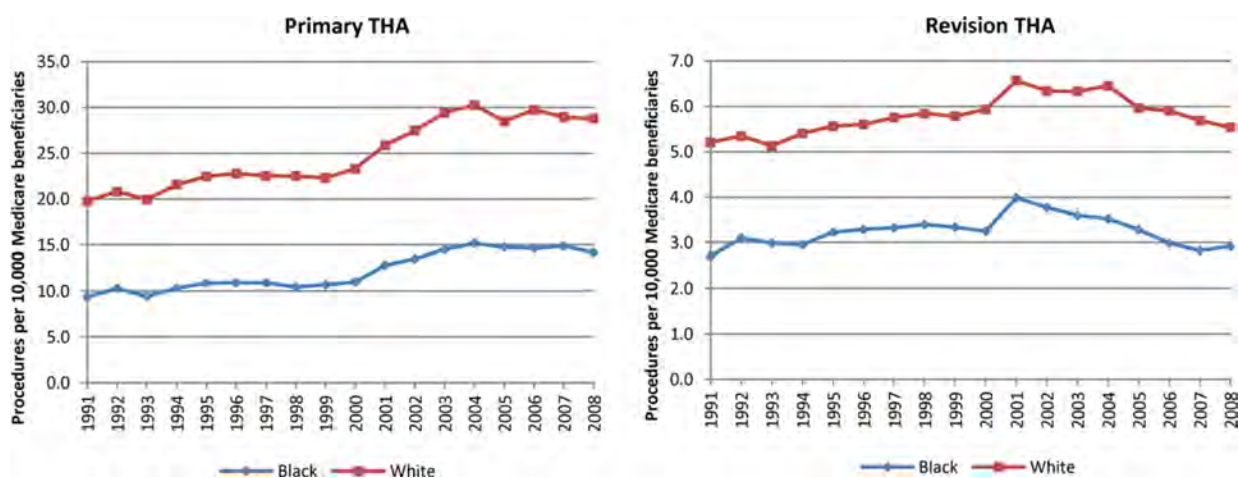
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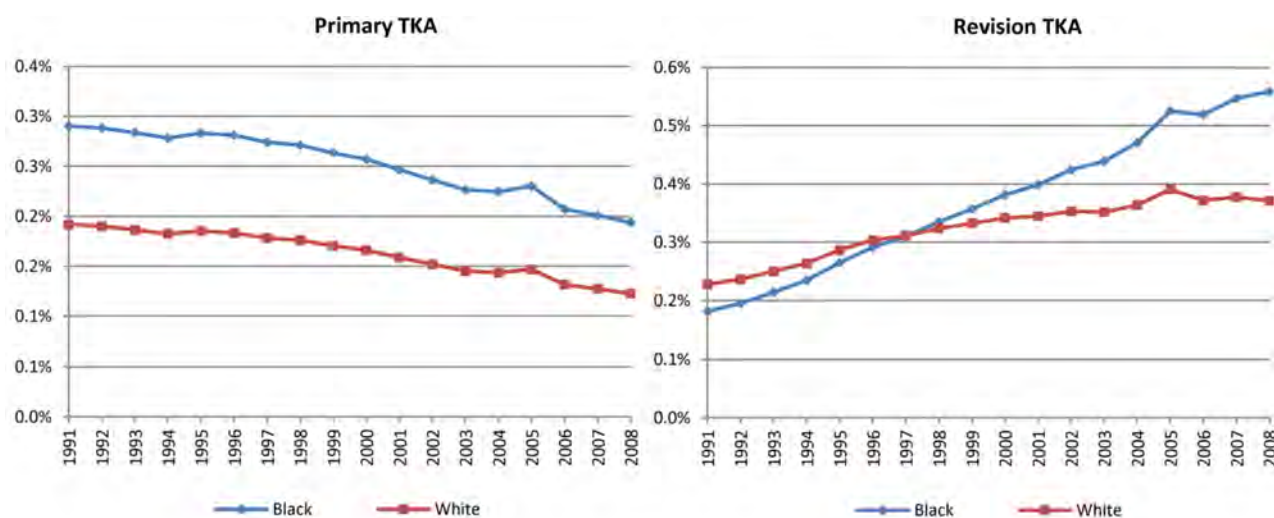




**Figure 1.**  
Standardized utilization rates per 10,000 enrollees for primary and revision TKA for Blacks and Whites

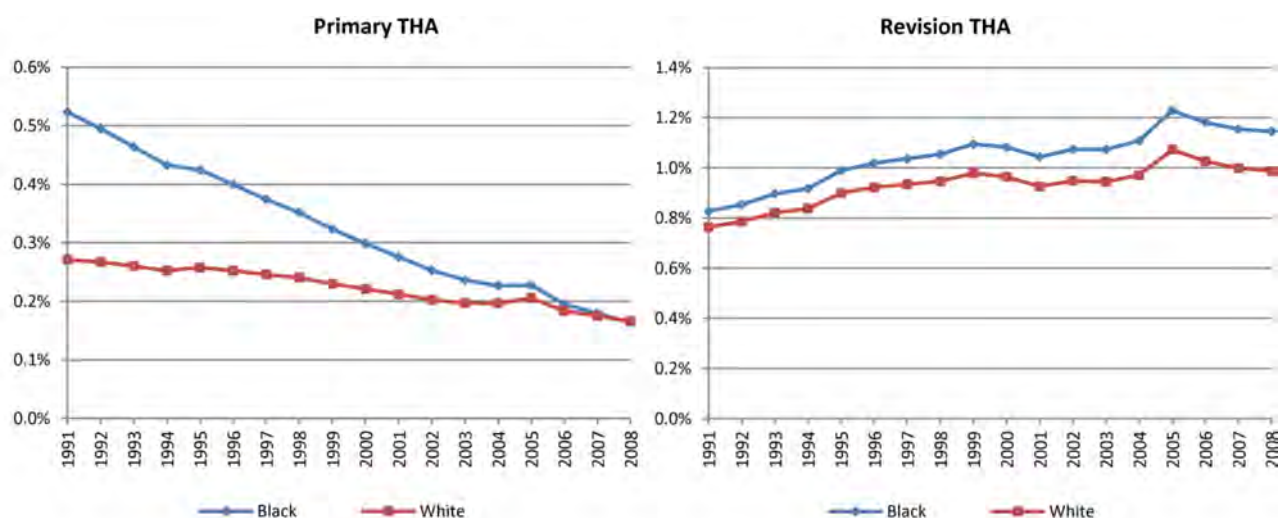


**Figure 2.**  
Standardized utilization rates per 10,000 enrollees for primary and revision THA for Blacks and Whites



<sup>a</sup>Mortality adjusted for age, sex, hospital procedure volume, and comorbidity

**Figure 3.**  
Adjusted<sup>a</sup> mortality for primary and revision TKA for Blacks and Whites



<sup>a</sup>Mortality adjusted for age, sex, hospital procedure volume, and comorbidity

**Figure 4.**  
Adjusted mortality<sup>a</sup> for primary and revision THA for blacks and whites



**Table 1**  
Patient characteristics for Black and White patients undergoing Primary and Revision TKA 1991-2008

	PRIMARY TKA		P-value	REVISION TKA		P-value
	BLACK (N=145888, 5.4%)	WHITE (N=2538687, 94.6%)		BLACK (N=18717, 7.0%)	WHITE (N=248927, 93.0%)	
Demographics						
Age, mean (SD)	73.5 (5.8)	74.6 (5.9)	<0.001	73.8 (6.1)	75.2 (6.2)	<0.001
Sex, women (%)	117327 (80.4)	1637435 (64.5)	<0.001	14583 (77.9)	144327 (58.0)	<0.001
Comorbidity, number (%)						
Diabetes	38163 (26.2)	389098 (15.3)	<0.001	5003 (26.7)	42462 (17.1)	<0.001
CHF	8006 (5.5)	105177 (4.1)	<0.001	1688 (9.0)	18568 (7.5)	<0.001
Obesity	16340 (11.2)	170627 (6.7)	<0.001	1902 (10.2)	15299 (6.2)	<0.001
Renal failure	4035 (2.8)	30555 (1.2)	<0.001	971 (5.2)	5365 (2.2)	<0.001
Number of comorbid conditions, mean (SD)	2.0 (1.4)	1.7 (1.4)	<0.001	2.1 (1.5)	1.8 (1.4)	<0.001

**Table 2**  
Patient characteristics for Black and White patients undergoing Primary and Revision THA 1991-2008

	PRIMARY THA		REVISION THA		P-value	WHITE (N=1272884, 95.8%)	P-value	REVISION THA		P-value	WHITE (N=302557, 95.3%)	P-value
	BLACK (N=56018, 4.2%)		BLACK (N=14851, 4.7%)					BLACK (N=14851, 4.7%)				
Demographics												
Age, mean (SD)	73.5 (6.0)		75.1 (6.2)		<0.001			75.0 (7.1)		<0.001	77.0 (6.9)	<0.001
Sex, women (%)	39371 (70.3)		806148 (63.3)		<0.001			9809 (66.1)		<0.001	189695 (62.7)	<0.001
Comorbidity, number (%)												
Diabetes	11839 (21.1)		139427 (11.0)		<0.001			3140 (21.1)		<0.001	33865 (11.2)	<0.001
CHF	2837 (5.1)		52390 (4.1)		<0.001			1294 (8.7)		<0.001	25492 (8.4)	0.22
Obesity	4458 (8.0)		55448 (4.4)		<0.001			687 (4.6)		<0.001	8177 (2.7)	<0.001
Renal failure	1774 (3.2)		15524 (1.2)		<0.001			932 (6.3)		<0.001	6346 (2.1)	<0.001
Number of comorbid conditions, mean (SD)	1.8 (1.4)		1.6 (1.3)		<0.001			2.1 (1.6)		<0.001	1.8 (1.5)	<0.001

**Table 3**

Unadjusted outcomes for Black and White patients undergoing Primary and Revision TKA 1991-2008

	PRIMARY TKA			REVISION TKA		
	BLACK	WHITE	P-VALUE*	BLACK	WHITE	P-VALUE*
<b>Length of Stay (# days, mean [SD])</b>						
1991-1993	9.7 (5.7)	8.3 (4.0)	<0.001	11.8 (10.8)	9.2 (8.0)	<0.001
1994-1996	6.4 (3.9)	5.7 (2.8)	<0.001	8.0 (7.3)	6.6 (6.1)	<0.001
1997-1999	4.8 (2.6)	4.5 (2.1)	<0.001	6.1 (6.6)	5.4 (4.7)	<0.001
2000-2002	4.5 (2.8)	4.2 (2.0)		6.0 (5.9)	5.4 (4.8)	
2003-2005	4.2 (2.2)	3.9 (1.9)		5.8 (5.2)	5.2 (4.9)	
2006-2008	3.9 (2.1)	3.6 (1.7)		5.9 (6.6)	5.0 (4.6)	
<b>30-day mortality, n (%)</b>						
1991-1993	55 (0.4)	642 (0.2)	<0.01	6 (0.3)	104 (0.4)	0.81
1994-1996	69 (0.3)	850 (0.2)	<0.01	7 (0.3)	138 (0.4)	0.20
1997-1999	71 (0.3)	893 (0.3)	0.64	12 (0.4)	188 (0.5)	0.29
2000-2002	73 (0.3)	828 (0.2)		26 (0.7)	226 (0.5)	
2003-2005	86 (0.3)	1068 (0.2)		20 (0.5)	282 (0.6)	
2006-2008	87 (0.3)	1093 (0.2)		30 (0.8)	286 (0.6)	
<b>30-day readmission, n (%)</b>						
1991-1993	717 (4.7)	12056 (4.4)	0.02	122 (6.9)	2047 (7.3)	0.46
1994-1996	920 (4.6)	14984 (4.3)	<0.001	168 (6.9)	2592 (7.1)	<0.001
1997-1999	1042 (4.9)	15143 (4.2)	<0.001	218 (7.4)	2940 (7.3)	<0.001
2000-2002	1086 (4.6)	16987 (4.2)		274 (7.8)	3337 (7.5)	
2003-2005	1474 (4.8)	23618 (4.4)		367 (9.2)	4198 (8.2)	
2006-2008	3088 (8.8)	40698 (6.7)		545 (13.6)	5440 (11.2)	
<b>30-day composite outcome, n (%)</b>						
1991-1993	293 (1.9)	4382 (1.6)	<0.001	45 (2.5)	932 (3.3)	0.07
1994-1996	392 (2.0)	5727 (1.6)	<0.001	78 (3.2)	1195 (3.3)	0.03
1997-1999	384 (1.8)	5793 (1.6)	0.17	127 (4.3)	1560 (3.9)	0.02
2000-2002	415 (1.8)	6462 (1.6)		174 (4.9)	1870 (4.2)	
2003-2005	559 (1.8)	8249 (1.6)		212 (5.3)	2446 (4.8)	
2006-2008	863 (2.5)	11647 (1.9)		280 (7.0)	2979 (6.1)	
<b>Discharged to Home, n (%)</b>						
1991-1993	10349 (68.3)	195535 (70.5)	<0.001	1223 (68.8)	20283 (72.6)	<0.001
1994-1996	9967 (49.5)	190682 (54.2)	<0.001	1369 (55.9)	21506 (58.8)	<0.001
1997-1999	7394 (34.7)	151393 (42.3)	<0.001	1176 (39.7)	18767 (46.4)	<0.001
2000-2002	6675 (28.2)	165610 (40.5)		1157 (32.8)	19593 (44.1)	
2003-2005	9025 (29.6)	232055 (43.6)		1284 (32.1)	22760 (44.7)	

	PRIMARY TKA			REVISION TKA		
	BLACK	WHITE	P-VALUE*	BLACK	WHITE	P-VALUE*
2006-2008	15025 (42.7)	336101 (55.1)		1615 (40.4)	24731 (51.0)	

\* For each set of P-Values: 1) the first p-value denotes White-Black disparity in 1991-1993; 2) the second p-value denotes White-Black disparity in 2006-2008; and 3) the last p-value denotes change in the disparity magnitude between 1991-93 and 2006-2008.



**Table 4**

Unadjusted outcomes for Black and White patients undergoing Primary and Revision THA 1991-2008

	PRIMARY THA			REVISION THA		
	BLACK	WHITE	P-VALUE	BLACK	WHITE	P-VALUE*
<b>Length of Stay (# days, mean [SD])</b>						
1991-1993	9.9 (5.5)	8.6 (4.4)	<0.001	14.8 (14.9)	11.6 (10.2)	<0.001
1994-1996	6.6 (4.3)	5.9 (3.1)	<0.001	10.1 (11.4)	7.9 (7.3)	<0.001
1997-1999	5.0 (3.0)	4.6 (2.3)	<0.001	7.8 (8.4)	6.3 (5.6)	<0.001
2000-2002	4.6 (3.4)	4.4 (2.2)		7.1 (6.8)	6.2 (5.4)	
2003-2005	4.3 (2.4)	4.0 (2.1)		7.0 (7.0)	6.1 (5.3)	
2006-2008	4.1 (2.5)	3.8 (1.9)		7.0 (6.8)	5.9 (5.4)	
<b>30-day mortality, n (%)</b>						
1991-1993	44 (0.7)	585 (0.4)	<0.001	32 (1.7)	550 (1.3)	0.24
1994-1996	36 (0.5)	628 (0.3)	0.36	34 (1.5)	656 (1.4)	0.26
1997-1999	46 (0.6)	639 (0.3)	<0.001	40 (1.6)	783 (1.6)	0.79
2000-2002	34 (0.4)	645 (0.3)		44 (1.6)	884 (1.6)	
2003-2005	34 (0.3)	716 (0.3)		45 (1.7)	943 (1.7)	
2006-2008	28 (0.2)	700 (0.3)		52 (2.2)	953 (1.8)	
<b>30-day readmission, n (%)</b>						
1991-1993	429 (6.5)	9470 (5.9)	0.02	196 (9.9)	3951 (9.4)	0.51
1994-1996	420 (5.4)	10068 (5.4)	<0.001	200 (8.7)	4370 (9.4)	<0.001
1997-1999	474 (5.9)	9850 (5.1)	0.09	255 (10.2)	4860 (9.6)	0.02
2000-2002	461 (4.7)	10308 (4.6)		279 (9.7)	5341 (9.5)	
2003-2005	551 (4.7)	12094 (4.8)		298 (10.9)	5723 (10.4)	
2006-2008	1103 (9.0)	19704 (7.6)		420 (17.1)	7585 (14.5)	
<b>30-day composite outcome, n (%)</b>						
1991-1993	178 (2.7)	3570 (2.2)	<0.01	83 (4.2)	1713 (4.1)	0.51
1994-1996	169 (2.2)	3939 (2.1)	0.19	103 (4.5)	2110 (4.5)	<0.001
1997-1999	189 (2.4)	3866 (2.0)	0.28	161 (6.4)	2601 (5.2)	0.02
2000-2002	176 (1.8)	3921 (1.8)		174 (6.1)	3071 (5.5)	
2003-2005	216 (1.9)	4523 (1.8)		191 (7.0)	3314 (6.0)	
2006-2008	300 (2.4)	5838 (2.3)		243 (9.9)	3925 (7.5)	
<b>Discharged to Home, n (%)</b>						
1991-1993	4326 (65.9)	106121 (65.8)	0.80	1138 (57.4)	23012 (55.0)	0.04
1994-1996	3638 (46.7)	92249 (49.3)	<0.001	1007 (43.9)	20188 (43.2)	<0.001
1997-1999	2562 (32.1)	71431 (37.3)	<0.001	816 (32.5)	16895 (33.5)	<0.001
2000-2002	2537 (26.2)	75537 (34.0)		717 (25.0)	17727 (31.6)	
2003-2005	3139 (26.9)	92466 (36.7)		657 (24.0)	17269 (31.3)	

	PRIMARY THA			REVISION THA		
	BLACK	WHITE	P-VALUE	BLACK	WHITE	P-VALUE*
2006-2008	4701 (38.2)	121689 (47.1)		685 (27.8)	18390 (35.1)	

\* For each set of P-Values: 1) the first p-value denotes White-Black disparity in 1991-1993; 2) the second p-value denotes White- Black disparity in 2006-2008; and 3) the last p-value denotes change in the disparity magnitude between 1991-93 and 2006-2008.



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## Racial disparities in readmission rates among patients discharged to skilled nursing facilities

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**Author Contributions:** Drs. Rivera-Hernandez and Trivedi had full access to all the data in the study and take responsibility for the integrity of the data and the accuracy of the data analysis. Study concept and design: Rivera-Hernandez, Rahman, Trivedi. Acquisition, analysis, or interpretation of data: All authors.

Drafting of the manuscript: Rivera-Hernandez; Critical revision of the manuscript for important intellectual content: All authors; Statistical analysis: Rivera-Hernandez, Rahman, Trivedi; Administrative, technical, or material support: Trivedi, Mor, Rivera-Hernandez; Study supervision: Trivedi.

### Conflict of Interest:

Dr. Amal Trivedi receives consulting fees to edit the Merck Manual. No other disclosures are reported. Dr. Vincent Mor has *three Significant Financial Interests (SFIs) that are broadly related to his area of research. His research area addresses policy issues related to the quality of nursing home care. It is conceivable that results from my research could affect the entire nursing home/post-acute care industry, including companies with which I work and/or in which I have financial interests.*

He is the Chair of the Independent Quality Committee at HCR ManorCare and is compensated for this service. HCR is a provider of short-term, post-hospital services, and long-term care. The company has a network of more than 500 nursing and rehabilitation centers, assisted living facilities, outpatient rehabilitation clinics, and hospice and home health care agencies.

He is a paid consultant to NaviHealth, Inc. and chair their Scientific Advisory Board. NaviHealth is wholly owned by Cardinal Health. The company offers post-acute care (PAC) management and services to more than 1.5 million beneficiaries in all regions of the country through its partnerships with health plans and health systems

He is former Director at PointRight, Inc. While he no longer provides any services or holds any positions at PointRight, He holds less than 1% equity. PointRight is a private company based in Cambridge, MA. It provides predictive analytics solutions to thousands of post-acute providers, long-term care providers, hospitals, payers and insurance organizations.

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## Abstract

**OBJECTIVES:** Prior studies have reported mixed findings about the existence of racial disparities in readmission rates among Medicare Advantage beneficiaries, but these studies have used data from one state, focused on black-white disparities and have not focused on patients discharged to skilled nursing facilities (SNFs). The objective of the study was to characterize racial and ethnic disparities in rates of 30-day rehospitalization directly from SNF among fee-for-service and Medicare Advantage patients.

**DESIGN:** A cross-sectional study of admissions to SNFs in 2015 was conducted.

**SETTING:** Skilled Nursing Facilities across the US.

**PARTICIPANTS:** The sample included 1,500,334 white, 213,848 African-American and 99,781 Hispanic Medicare patients who were admitted to 13,375 SNFs.

**MEASUREMENTS:** The main outcome of interest was readmission, which was identified as patients sent back to any hospital directly from the SNF within 30 days of admission, as indicated on the Minimum Data Set discharge assessment.

**RESULTS:** Overall readmission rates for fee-for-service patients were 16.7% (95% CI, 16.7% to 16.8%) for whites, 18.8% (95% CI, 18.7% to 19.0%) for African-Americans, 17.4% (95% CI, 17.1% to 17.7%) for Hispanics. Readmission rates in Medicare Advantage were 14.7% (95% CI, 14.5% to 14.8%) for whites, 16.8% (95% CI, 16.6% to 17.1%) for African-Americans, and 15.3% (95% CI, 14.9% to 15.6%) for Hispanics. In addition, we also found that African-Americans had about 1% higher readmission rates than whites, even when they received care within the same SNF. There were no statistically significant differences in the magnitude of within-SNF racial disparities in Medicare Advantage compared to Medicare fee-for-service.

**CONCLUSION:** We found racial disparities in readmission rates even within the same facility for both Medicare Advantage and fee-for-service beneficiaries. Intervention to reduce disparities in readmission rates, as well as more comprehensive quality measures that incorporate outcomes for Medicare Advantage enrollees are needed.

## Keywords

Disparities in 30-Day Readmission Rates; Readmissions in skilled nursing facilities; Medicare Advantage; Disadvantaged populations in skilled nursing facilities; Disparities in readmissions among Medicare Advantage and fee-for-service patients



## INTRODUCTION

About 20 percent of Medicare patients are discharged to skilled nursing facilities (SNFs) following a hospital stay.<sup>1</sup> Readmissions from SNFs are common and costly; in 2010, one-quarter of SNF patients were readmitted to the hospital within 30 days of discharge, which cost Medicare over \$4 billion.<sup>2</sup> In addition to the cost, readmissions to hospitals are also viewed as a measure of SNF quality.<sup>3</sup> The Centers for Medicare and Medicaid (CMS) have focused efforts to reduce readmissions, including profiling SNF's readmission rates, and including instituting financial penalties for SNFs with higher-than-expected readmission rates.<sup>4</sup>

Evidence has shown that overall rates of readmission have decreased over time;<sup>5,6</sup> however, racial disparities remain evident.<sup>7–10</sup> One study by Li and colleagues<sup>11</sup> found that, in 2008, rehospitalization rates were 14.3 percent for White patients, compared to 18.6 percent among African-American Medicare patients admitted to SNFs for post-acute care. The CMS measures readmission rates from fee-for-service patients exclusively and does not collect or report data on racial/ethnic variations. Yet, Medicare Advantage (MA) provides coverage to 17.6 million people (31% of Medicare beneficiaries), and it is the preferred choice of coverage for minority groups.<sup>12</sup> Approximately 40% of MA beneficiaries have incomes of less than \$20,000, and 45% of Hispanics and 29% of African-Americans enrolled in a MA plan in 2016.<sup>12</sup>

Prior studies have reported mixed findings about the existence of racial disparities in readmission rates among MA beneficiaries, but these studies have used data from one state, only focused on black-white disparities, and did not consider SNF specific effects.<sup>13,14</sup> Therefore, there is limited national evidence on racial/ethnic disparities among post-acute SNFs residents enrolled in fee-for-service and MA. Using a national dataset, we characterized racial and ethnic disparities in 30-day rehospitalization rates and the quality of admitted SNF among fee-for-service and MA patients admitted to SNFs. Based on literature on disparities in quality of SNF care and rehospitalization rates,<sup>11</sup> we hypothesized that African-Americans and Hispanics admitted to SNFs would experience higher rates of rehospitalization, and racial/ethnic differences in readmission rates will be partially explained by within-facility disparities. We also hypothesized that disparities will be lower among MA patients.

## STUDY DATA AND METHODS

### Data and Population

We used the 2015 national Minimum Data Set 3.0 (MDS)<sup>15</sup> merged to the Medicare Master Beneficiary Summary File (MBSF).<sup>16</sup> In addition, we merged these files to the Long-Term Care: Facts on Care in the US (LTCFocus)<sup>17</sup> and Nursing Home Compare (NHC) Five-Star Ratings database to obtain facility-level characteristics using the provider number.<sup>18</sup> Finally, we obtained information regarding rurality from Census and merged it using SNF county number.<sup>19</sup> The MDS provides patient level information on all nursing home admissions, including patients in MA. The MBSF contains: race/ethnicity, dual-eligibility and enrollment status. We used the Research Triangle Institute's race/ethnicity variable with

mutually exclusive categories: non-Hispanic white (hereafter, “white”), non-Hispanic African-American (hereafter, “African-American”), and Hispanic.<sup>20</sup> LTCFocus contains information regarding SNF characteristics, and NHC contained information about nursing home quality star ratings. The Census provided the percentage of the county population living in rural areas.

We applied previously published eligibility criteria used by the American Health Care Association (AHCA).<sup>21</sup> We identified all fee-for-service and MA patients with first non-entry tracking MDS assessments who were admitted from an acute hospital to a SNF. We identified 1,851,078 patients from 15,412 SNFs. There were 15% of data with missing values regarding most AHCA domains and facility characteristics and we used multiple imputation to account for missing data. The variable with the highest fraction of missing was whether the patient was receiving cancer chemotherapy with 12%. We generated 5 replicates of complete datasets imputed for analysis. The imputation model included age, sex, race and ethnicity, cognitive impairment and the outcome variable. We completed the imputation step and the pooling step by using *mi impute* and *mi estimate* procedures in STATA 15.<sup>22</sup>

Our final analyses included patients in facilities with at least 30 admissions in the denominator. Hence, our final sample included 1,813,963 (1,500,334 White, 213, 848 African-American and 99,781 Hispanic) patients from 13,375 SNFs. Sensitivity analysis were performed with all facilities irrespective of sample size and with complete cases and the results remained stable (See Supplementary Material). The study protocol was approved by the Brown University’s Human Research Protections Office and the Centers for Medicare & Medicaid Services Privacy Board.

## Measures

The outcome of interest was readmission directly from the SNF, which was identified as patients sent back to any hospital (excluding ER only visits) from the SNF within 30 days of admission, as indicated on the MDS discharge assessment.<sup>23</sup>

**Independent variables**—The primary independent variables were race/ethnicity and enrollment in Medicare fee-for-service or MA at admission.

**Individual-level variables**—Demographic covariates, based on the AHCA risk-adjusted model included:<sup>21</sup> age <65, male sex, dual Medicaid eligibility status. Other covariates, grouped by domain, included: **functional status:** Total bowel incontinence, eating dependent, needs two-person assistance in activities of daily living (ADLs), cognitive impairment; **prognosis:** End stage prognosis poor, history of respiratory failure, receiving hospice care; **clinical condition:** Daily pain, pressure ulcer stage (4 variables), venous arterial ulcer, diabetic foot ulcer; **diagnosis:** Anemia, asthma, diabetes, history of heart failure, history of sepsis, history of viral hepatitis, history of internal bleeding; and **services and treatments:** Dialysis, insulin prescribed, ostomy care, cancer chemotherapy, receiving radiation therapy, continue to receive IV medication, continue to receive oxygen, continued tracheostomy care.

**Facility-level variables**—Variables at the facility level included percentage of residents whose primary support is Medicaid, for-profit tax status, whether the facility is part of a chain, the number of certified nursing assistant hours per resident day, licensed practical nurse per resident day, registered nurse per resident day, and percent rurality (the percentage of the county population living in rural areas of the county where the SNF was located).

In addition, we reported two other variables of interest including, quality and racial composition of the SNF. We measured quality using NHC five-star quality rating with values ranging from 1 star for lowest quality to 5 stars for the highest quality facilities.<sup>18</sup> Racial composition of SNF was measured by calculating the percentage of white patients that were admitted to each SNF.

### Analytical Approach

First, we compared the frequency of readmissions among racial and ethnic groups using chi-square tests. Then, we examined the readmission rates in order to determine how much of the racial and ethnic inequality in readmission rates is attributable to differences across SNFs versus within SNFs. Prior research examining overall and within-disparities have used this approach.<sup>24–26</sup> Model 1 assessed readmission differences relative to whites using Ordinary Least Square (OLS) regression models. This model examined the overall difference in the risk of readmissions between African-Americans and Hispanics compared to Whites, controlling for individual-level risk factors. Model 2 included facility-level characteristics (for-profit status, staffing variables, %Medicaid, rurality). Model 3 was specified using SNF fixed-effects to account for the clustering of patients within facilities and estimate the mean within-SNF disparity for white and minority patients admitted to the same SNF. We included an interaction term in the models to test whether racial and ethnic disparities varied by MA status.

In addition, we ran OLS regression models to compare 30-day adjusted readmission rates by the decile of the proportion of white patients admitted to the SNF; and 30-day adjusted readmission rates and SNF star ratings stratified by enrollment status. We plotted the results of these two models. SAS 9.4 was used to construct analytic datasets and Stata 15 was used to conduct the analyses.

## RESULTS

Table 1 summarizes descriptive and clinical characteristics of the sample by race and ethnic group and by MA enrollment. African-Americans and Hispanics were slightly younger and have higher proportions of males and dual eligibility for Medicaid compared to whites regardless of type of plan. However, MA patients have one to eleven percent fewer people that were dual eligible for Medicare/Medicaid. In addition, African-Americans and Hispanics had worse functional status and cognitive impairment, along with higher rates among fee-for-service patients. Finally, African-Americans and Hispanics were more likely to have anemia and diabetes. Similarly, fee-for-service patients had higher rates of these conditions (See Supplementary Table S1 for complete Table). In addition, African-Americans and Hispanics in both Medicare programs were admitted to a higher proportion

of SNFs with for-profit status, with residents whose primary support is Medicaid, and lower registered nurse hours per resident day (See Supplementary Table S2).

The frequency of readmissions was lower for whites as compared with African-Americans and Hispanics in both MA and fee-for-service patients (16.1% vs. 21.3% vs. 19.3% for fee-for-service; 14.9% vs. 18.8% vs. 16.6% for MA;  $P<.0001$ ). However, MA patients had readmissions that were about one to three percentage points (p.p.) lower than their counterparts.

Readmission rates for fee-for-service patients were 16.7% (95% Confidence Interval [CI], 16.7% to 16.8%) for whites, 18.8% (95% CI, 18.7% to 19.0%) for African-Americans, 17.4% (95% CI, 17.1% to 17.7%) for Hispanics vs. rates for MA were 14.7% (95% CI, 14.5% to 14.8%) for whites, 16.8% (95% CI, 16.6% to 17.1%) for African-Americans, and 15.3% (95% CI, 14.9% to 15.6%) for Hispanics. Accordingly, adjusted readmission rates were lower for whites by 2.1 percentage points than African-Americans (95% CI, 1.9 to 2.3) and 0.7 p.p. than Hispanics (95% CI, 0.4 to 1.0) among fee-for-service patients (See Figure 1). Similarly, among patients in MA the rates were lower for whites by 2.1 p.p. (95% CI, 1.8 to 2.4) than African-Americans and by 0.5 p.p. (95% CI, 0.2 to 0.9) than Hispanics. We found African-Americans had higher readmission rates overall (the difference persisted, although the magnitude was reduced, after including facility attributes [or state fixed effects; See Supplementary Table S3]), as well as within the same facility. For example, as shown in Table 2, among fee-for-service patients, the overall differences in readmission rates were 0.7 p.p. higher [95% CI, 0.4 to 0.9] for African-Americans than whites within the same facility. Similarly, there were 0.6 p.p. higher [95% CI, 0.3 to 0.9] for African-American beneficiaries when compared to White beneficiaries in the MA program. Among Hispanics, ethnicity was no longer a significant predictor of readmissions after including facility-level characteristics.

Figures 2 and 3 describe the relationship between the proportion of White patients and the quality measures in the SNF. We found that readmission rates for the three groups decreased as the quality of SNF increased (Figure 2). However, Whites had lower rates compared to Hispanics and African-Americans regardless of the SNF star rating. In addition, rates were about two p.p. lower for beneficiaries in the MA program across SNFs ( $P<.0001$ ). For instance, for beneficiaries enrolled in fee-for-service that were admitted to SNFs with one-star rating, readmission rates for Whites were 17.2% (95% CI, 17.1% to 17.3) compared to 17.9% (95% CI, 17.6% to 18.2%) for Hispanics and 19.3% (95% CI, 19.1% to 19.5%) for African-Americans. Readmission rates for White MA beneficiaries who were admitted to SNFs with one-star rating were 15.8% (95% CI, 15.7% to 16.0%), and approximately 2.1 (95% CI, 1.8 to 2.4) p.p. higher for African-Americans and 0.6 (95% CI, 0.2 to 0.9) p.p. higher for Hispanics.

Rates were slightly lower for MA beneficiaries when compared to fee-for-service beneficiaries regardless of the racial composition of the SNF (See Figure 3;  $P<.0001$ ), but readmission rates for Whites and Hispanics in the MA program was somewhat similar as compared to those beneficiaries in the fee-for-service program. For fee-for-service beneficiaries admitted to SNFs in the first decile of percent of white patients, readmission rates were 19.1% (95% CI, 19.0 to 19.2) for whites, 20.9% (95% CI, 20.6 to 21.2) for



Hispanics and 22.4% (95% CI, 22.2 to 22.6) for African-Americans. Whereas for MA beneficiaries admitted to the same facilities, readmission rates were 17.2% (95% CI, 17.1% to 17.4%) for Whites, 16.8% (95% CI, 16.4% to 17.1%) for Hispanics 19.6% (95% CI, 19.3% to 19.8%) for African-Americans.

## DISCUSSION

In this national study of racial and ethnic differences in 30-day readmission rates among MA and fee-for-service patients following admission to SNFs, we found statistically significant racial and ethnic differences of about 2 percentage points higher rates for African-Americans, and less than one percentage point for Hispanics. MA patients had about 2 percentage points lower readmission rates compared to fee-for-service patients. However, the magnitude of racial/ethnic disparity in readmission rates was not different in MA compared to fee-for-service. In addition, we found that readmission rates for the three groups decreased as the fraction of White patients in the facility increased.

Our findings extend previous studies by showing that racial and ethnic disparities in readmission rates among Medicare SNF patients are partially due to within-facility disparity, meaning that African-Americans in the same SNF are more likely than whites to be readmitted to the hospital than whites. Prior studies have found differences in 30-day readmission rates among Medicare beneficiaries.<sup>8,10</sup> Li et al.<sup>27</sup> found that among Medicare post-acute SNF patients, African-Americans had higher rates of rehospitalizations than whites, as well as 40% higher risk of being hospitalized within 30 days of admission.<sup>11</sup> Observed racial differences in these studies have been partially attributable to SNFs with higher concentrations of African-American residents. Similarly, Rivera-Hernandez and colleagues found that SNFs that served higher proportion of African-Americans had higher readmission rates.<sup>28</sup> We extended this work to explore racial and ethnic differences in 30-day readmission rates among Medicare fee-for-service and MA post-acute SNF patients and the role of race and ethnicity driving these disparities. The findings of our study reinforce the results of others, demonstrating that racial disparities persisted within subgroups of patients in the same SNFs.<sup>11,29</sup> Contrary to the results of other studies that have found that MA has been successful at reducing racial disparities<sup>13</sup> or the studies that have found greater disparities in readmission rates among MA patients compared to those in fee-for-service,<sup>14</sup> we found similar racial differences in adjusted readmission rates for MA and fee-for-service enrollees. In addition, our study contrasts with the findings of Rodriguez and colleagues<sup>30</sup> who found that Hispanic Medicare patients had substantially higher readmission rates within 30 days after being discharged for heart failure and acute myocardial infarction as compared to white patients.

Our findings may have differed from those of previous studies for three reasons. First, prior studies<sup>30</sup> have compared condition-specific readmission rates whereas we used all-cause readmission rates. Second, studies have limited their data to inpatient claims, which often excludes MA patients.<sup>8,10,27</sup> Our study is focused on patients who receive post-acute care at SNFs and uses the MDS to capture patients that were discharged to the hospital. Third, our analysis included demographic and clinical variables from a well-validated model applied by

AHCA.<sup>21</sup> Finally, other studies have limited their analysis to specific region(s),<sup>13,14</sup> whereas we included national data and focus on fee-for-service and MA patients.

Our findings have important policy implications. Our study highlights that racial and ethnic differences in readmission rates are partially due to within-SNF disparity. For African-Americans, within-facility effects appeared to be ~30% of the overall effects. In terms of readmissions among Hispanics, we found no within-facility disparities. Our study suggests that racial and ethnic disparities in readmission rates is partially due to a cross-facility differences. Patients from facilities with higher concentration of Whites have lower readmission rates. Our findings suggest that these facilities may provide overall better quality, as reflected by higher star ratings and better staffing. As it has been suggested by prior literature,<sup>28,31</sup> it is important to address issues influencing the quality of care of SNFs that serve predominantly minority populations.

Decreasing the rate of hospitalizations from nursing home facilities continues to be an important area of emphasis for CMS and other policy makers. The recently implemented Skilled Nursing Facility Value-Based Purchasing Program (SNF VBP) includes financial penalties for SNFs with high readmission rates, as measured by the risk-standardized 30-day rate of unplanned readmissions within 30 days among fee-for-service enrollees.<sup>4</sup> Our findings suggest that SNFs that provide care to minority patients may be subjected to higher penalties. Our results also suggest the need to track outcomes for MA patients and importance of measuring and reporting hospital readmissions from post-acute patients for both MA and fee-for-service rather than just those patients covered by fee-for-service. This is particularly important in monitoring quality and disparities for minority patients, since African-Americans and Hispanics are more likely to be enrolled in MA.

Successful efforts to reduce rehospitalizations in SNF settings often require improving care coordination and care planning.<sup>32</sup> Racial and ethnic differences have been noted in provider and patient communication, as well as higher utilization of aggressive end-of-life treatment among minority patients.<sup>33</sup> For instance, African-Americans and Hispanics in particular are less likely to document advanced care plans.<sup>34–36</sup> Racial disparities regarding advance health care planning has also been found in the Medicare population.<sup>37</sup> Studies have shown lower 30-day readmission rates among post-acute care patients who received a palliative care consultation.<sup>38,39</sup> The potential mediators of within-facility racial and ethnic disparities in rehospitalization, including patient preferences or provider attitudes,<sup>40,41</sup> deserve further investigation.

Our study has some limitations. Although we used MDS resident assessment records and adjusted for clinical and demographic characteristics, we did not include risk factors or other variables related to caregiver, family support or patient preferences regarding end-of-life care<sup>40</sup> that may be associated with rehospitalization. In addition, our study did not include information regarding discharged hospitals or other geographic factors such as provider norms,<sup>2</sup> practice patterns that may influence hospital readmissions among post-acute care patients. However, we used a well-recognized risk-adjusted model from AHCA. We further adjusted for SNFs characteristics and compared quality and racial composition of SNF with readmission rates. Future studies should explore the potential impact of these or other factors

in racial differences in skilled nursing facility readmissions. Second, our study has missing data. However, sensitivity analyses irrespective of size and data completeness show similar patterns regarding racial disparities (See Supplementary Tables S4 and S5). Third, our findings may not generalize to specific clinical conditions, and our data do not allow stratification according to medical vs. surgical patients.<sup>13,14</sup> Studies have found poor agreement between condition-specific and all-cause readmission measures.<sup>42</sup> Yet, the SNF Readmission Measure from CMS is also an all-cause risk-standardized readmission measure.<sup>43</sup> To this extent, our study aligns with CMS goals to target a larger proportion of readmissions and provide comprehensive information about quality of care.<sup>43</sup> Of note, a strength of this study is that we included MA patients, which the CMS SNF readmission measure excludes.

## CONCLUSION

Overall, among a national cohort of African-Americans, Hispanics and White patients admitted to skilled nursing facilities post-acute care, we found disparities in readmission rates even within the same facility. Intervention to reduce disparities in readmission rates, as well as more comprehensive quality measures that incorporate outcomes for MA enrollees are needed.

## Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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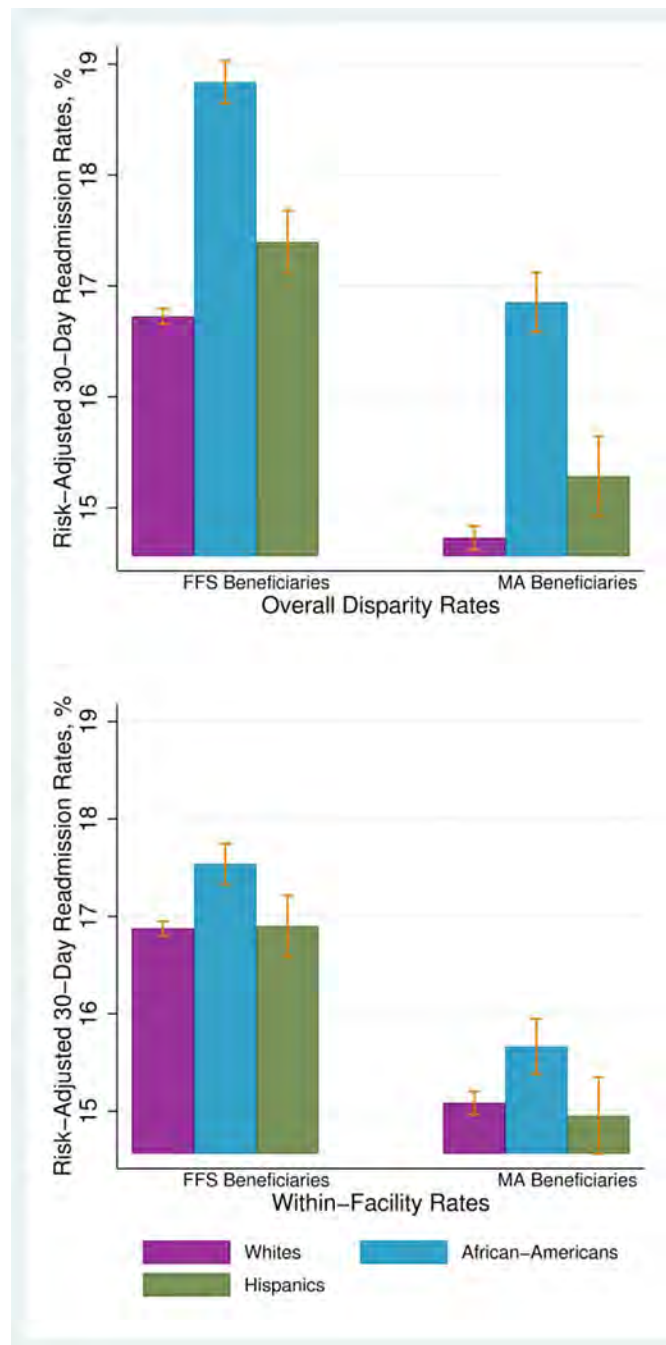
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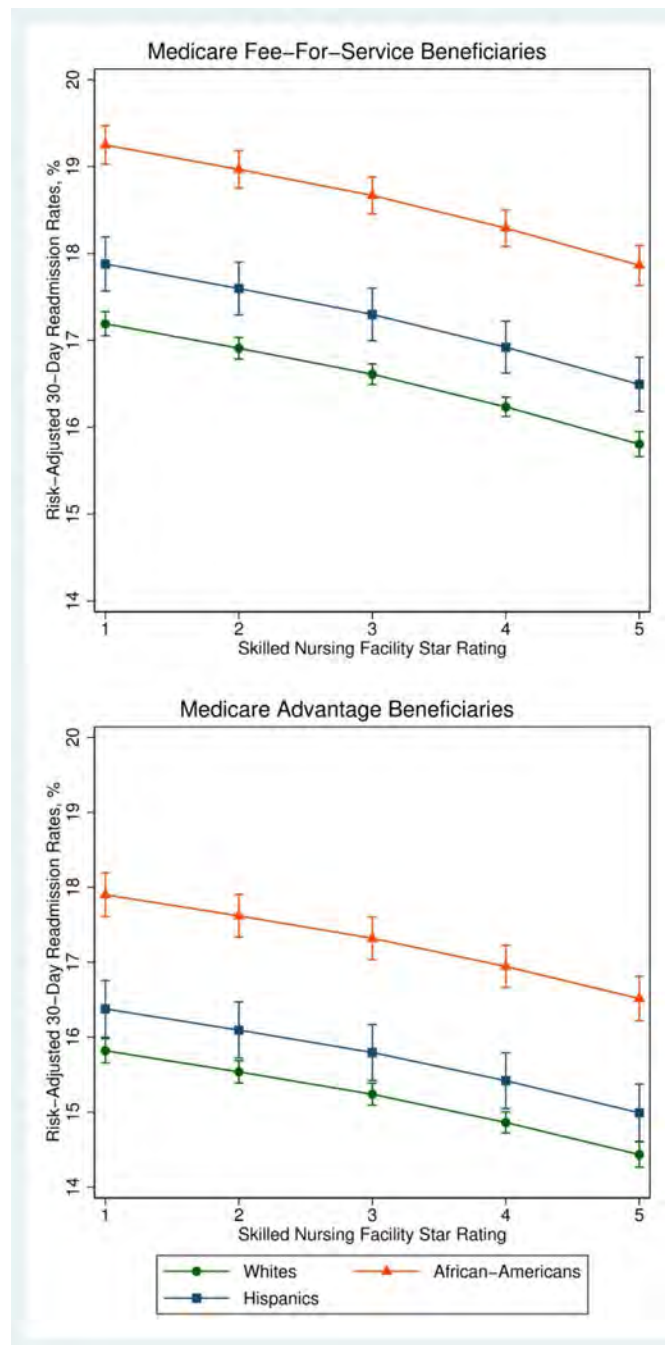


**FIGURE 1. Patient level 30-day risk-adjusted readmission rates by racial and ethnic groups and by Medicare Advantage and fee-for-service.**

The top panel shows overall racial and ethnic disparities in readmission rates and the bottom panel shows within-facility readmission rates. Readmissions were measured directly from the Skilled Nursing Facility (SNF), which was identified as patients sent back to any hospital (excluding ER only visits) from the SNF within 30 days of admission, as indicated on the discharge assessment. The models adjusted for demographic covariates, based on the American Health Care Association risk-adjusted model included: 18 age <65, male sex, dual Medicaid eligibility status; functional status: Total bowel incontinence, eating dependent,

needs two-person assistance in activities of daily living (ADLs), cognitive impairment; prognosis: End stage prognosis poor, history of respiratory failure, receiving hospice care; clinical condition: Daily pain, pressure ulcer stage (4 variables), venous arterial ulcer, diabetic foot ulcer; diagnosis: Anemia, asthma, diabetes, history of heart failure, history of sepsis, history of viral hepatitis, history of internal bleeding; and services and treatments: Dialysis, insulin prescribed, ostomy care, cancer chemotherapy, receiving radiation therapy, continue to receive IV medication, continue to receive oxygen, continued tracheostomy care.

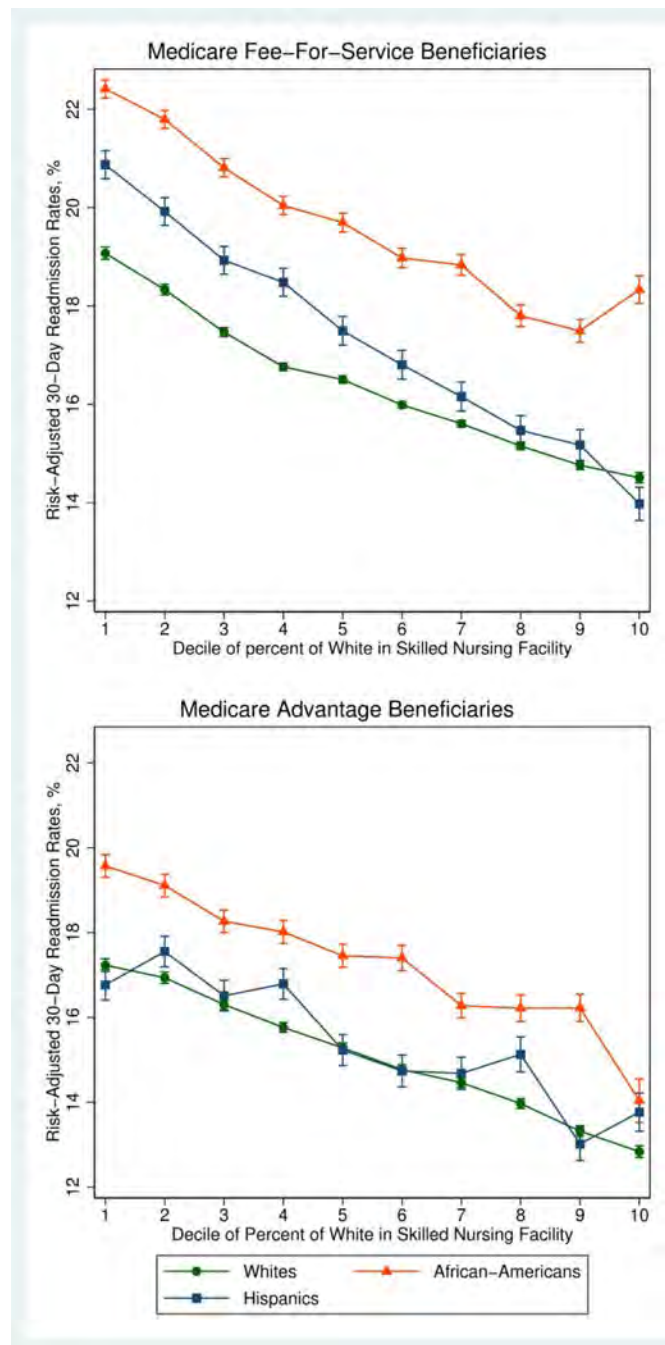




**FIGURE 2. Patient level 30-day risk-adjusted readmission rates by racial and ethnic groups and by quality of chosen skilled nursing facility stratified by Medicare Advantage and fee-for-service beneficiaries.**

Readmissions were measured directly from the Skilled nursing facility (SNF), which was identified as patients sent back to any hospital (excluding ER only visits) from the SNF within 30 days of admission, as indicated on the discharge assessment. The models adjusted for demographic covariates, based on the American Health Care Association risk-adjusted model included: 18 age <65, male sex, dual Medicaid eligibility status; functional status: Total bowel incontinence, eating dependent, needs two-person assistance in activities of

daily living (ADLs), cognitive impairment; prognosis: End stage prognosis poor, history of respiratory failure, receiving hospice care; clinical condition: Daily pain, pressure ulcer stage (4 variables), venous arterial ulcer, diabetic foot ulcer; diagnosis: Anemia, asthma, diabetes, history of heart failure, history of sepsis, history of viral hepatitis, history of internal bleeding; and services and treatments: Dialysis, insulin prescribed, ostomy care, cancer chemotherapy, receiving radiation therapy, continue to receive IV medication, continue to receive oxygen, continued tracheostomy care. The SNF's Medicare five-star quality rating is a composite measure summarizing skilled nursing facilities' staffing, quality measures, and health inspections related information with values ranging from 1 star for lowest quality to 5 stars for the highest quality facilities.



**FIGURE 3. Patient level 30-day risk-adjusted readmission rates by racial and ethnic group and by the decile of the percent of White patients in the chosen skilled nursing facility stratified by Medicare Advantage and fee-for-service beneficiaries.**

Readmissions were measured directly from the skilled nursing facility (SNF), which was identified as patients sent back to any hospital (excluding ER only visits) from the SNF within 30 days of admission, as indicated on the discharge assessment. The models adjusted for demographic covariates, based on the American Health Care Association risk-adjusted model included: 18 age <65, male sex, dual Medicaid eligibility status; functional status: Total bowel incontinence, eating dependent, needs two-person assistance in activities of

daily living (ADLs), cognitive impairment; prognosis: End stage prognosis poor, history of respiratory failure, receiving hospice care; clinical condition: Daily pain, pressure ulcer stage (4 variables), venous arterial ulcer, diabetic foot ulcer; diagnosis: Anemia, asthma, diabetes, history of heart failure, history of sepsis, history of viral hepatitis, history of internal bleeding; and services and treatments: Dialysis, insulin prescribed, ostomy care, cancer chemotherapy, receiving radiation therapy, continue to receive IV medication, continue to receive oxygen, continued tracheostomy care.



**Table 1.**

Characteristics of patients admitted to skilled nursing facilities, by race and ethnic group and by Medicare fee-for-service and Medicare Advantage Enrollment Status (N=1,813,963).

	Fee-for-Service			Medicare Advantage		
	Whites (1,085,349)	African- Americans (144,253)	Hispanics (61,531)	Whites (414,985)	African- Americans (69,595)	Hispanics (38,250)
Numbers presented in percentages						
<i>Age &lt; 65</i>	8.01	20.0	15.2	7.01	15.1	10.4
<i>Male</i>	36.3	41.0	42.2	35.9	36.6	41.3
<i>Dual status</i>	30.4	60.5	68.6	29.0	56.4	57.6
<i>Total bowel incontinence</i>	48.4	62.6	58.0	46.5	58.4	53.7
<i>Eating dependent</i>	4.8	11.9	11.4	3.8	8.7	7.7
<i>Two-person assistance</i>	54.7	56.9	54.6	55.8	54.5	51.3
<i>Cognitive impairment</i>						
<i>Intact</i>	49.8	42.0	38.6	50.6	44.4	43.3
<i>Mildly impaired</i>	18.3	17.9	18.4	17.1	17.2	17.7
<i>Moderately impaired</i>	29.4	36.6	39.1	30.5	35.7	36.6
<i>Severely impaired</i>	2.4	3.5	3.9	1.8	2.6	2.4
<i>Anemia</i>	28.6	37.2	33.3	28.1	34.4	30.1
<i>Diabetes</i>	31.2	47.8	50.1	32.7	48.0	49.9
<i>Dialysis</i>	2.0	9.7	7.5	1.6	5.9	4.4
<i>Insulin prescribed</i>	20.6	34.9	38.9	19.6	31.7	33.6

Notes: Differences across fee-for-service and Medicare Advantage groups significant at  $P < .001$ .

**Table 2:**

Overall, within-facility effects on 30-day readmission rates among post-acute care patients by Medicare Advantage status (N=1,813,963).

Groups	Overall effects	+Facility characteristics	+Within-facility effects
<i>Medicare Fee-for-service</i>			
African-Americans vs. Whites	2.1 [1.9 to 2.3]	1.8 [1.6 to 2.0]	0.7 [0.4 to 0.9]
Hispanics vs. Whites	0.7 [0.4 to 1.0]	0.3 [−0.02 to 0.6]	0.02 [−0.3 to 0.3]
<i>Medicare Advantage</i>			
African-Americans vs. Whites	2.1[1.8 to 2.4]	1.9 [1.6 to 2.2]	0.6 [0.3 to 0.9]
Hispanics vs. Whites	0.6 [0.2 to 0.9]	0.2 [−0.02 to 0.5]	−0.1 [−0.5 to 0.3]

Notes: Readmissions were measured directly from the skilled nursing facility (SNF), which was identified as patients sent back to any hospital (excluding ER only visits) from the SNF within 30 days of admission, as indicated on the discharge assessment. The models adjusted for demographic covariates, based on the American Health Care Association risk-adjusted model included: 18 age <65, male sex, dual Medicaid eligibility status; functional status: Total bowel incontinence, eating dependent, needs two-person assistance in activities of daily living (ADLs), cognitive impairment; prognosis: End stage prognosis poor, history of respiratory failure, receiving hospice care; clinical condition: Daily pain, pressure ulcer stage (4 variables), venous arterial ulcer, diabetic foot ulcer; diagnosis: Anemia, asthma, diabetes, history of heart failure, history of sepsis, history of viral hepatitis, history of internal bleeding; and services and treatments: Dialysis, insulin prescribed, ostomy care, cancer chemotherapy, receiving radiation therapy, continue to receive IV medication, continue to receive oxygen, continued tracheostomy care. Disparities were not different between MA and FFs tested via interaction terms.



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## Disparities in Surgical 30-Day Readmission Rates for Medicare Beneficiaries by Race and Site of Care

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### Abstract

**Objective**—To determine whether black patients have higher odds of readmission than white patients following major surgery, and to ascertain whether these disparities are related to where black patients receive care.

**Summary Background Data**—Racial disparities are known to exist for many aspects of surgical care. However, it is unknown if disparities exist in readmissions following a surgical procedure, an area which is becoming a prime focus for clinical leaders and policymakers.

**Methods**—Using national Medicare data from 2007–2010, we examined 30-day readmissions for patients undergoing coronary artery bypass grafting, pulmonary lobectomy, endovascular abdominal aortic aneurysm repair, open abdominal aortic aneurysm repair, colectomy, and hip replacement. The main outcome measure was risk-adjusted odds of all-cause 30-day readmission. We used multivariate logistic regression to determine if black patients had higher readmission rates than white patients, and if so, whether this effect was mediated by the hospitals at which patients received care, or by poverty.

**Results**—Black patients had higher readmission rates than white patients (14.8% vs. 12.8%, odds ratio [OR] 1.19; 95% confidence interval [CI], 1.16–1.22;  $p < 0.001$ ). Patients undergoing major surgery at minority-serving hospitals also had higher readmission rates (14.3% vs. 12.8%, OR 1.14, 95% CI 1.09–1.19;  $p < 0.001$ ). In multivariate analyses, black patients at minority-serving hospitals had the highest overall odds of readmissions (OR 1.34). White patients at minority-serving hospitals (OR 1.15) and black patients at non-minority-serving hospitals (OR 1.20) also had higher odds of readmission than the reference group of white patients at non-minority-serving hospitals. Racial disparities were mediated in part by poverty.

**Conclusions**—Among Medicare beneficiaries, black patients were more likely to be readmitted after hospitalization for surgical procedures. Since racial disparities in readmission rates are mediated both by patients' race and the hospital at which care is delivered, efforts at reducing

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disparities should not only focus on race-based measures, but also should focus on improving outcomes of care at minority-serving hospitals.

## Keywords

readmission; quality improvement; disparity; race; surgery

## Introduction

Readmission following a hospitalization is an important clinical outcome that has implications for both quality and costs of care. Especially for surgical conditions, readmissions have become increasingly accepted as a measure of quality, as surgical complications have been closely linked to readmission rates.<sup>1-3</sup> Currently, little is known about racial disparities in readmissions following surgical procedures. Existing evidence would suggest there is reason for concern, as racial disparities are known to exist for many other surgical outcomes: black patients have higher mortality rates following major cardiovascular and cancer operations,<sup>4</sup> lower odds of undergoing curative surgery for cancer operations,<sup>5</sup> and a lower likelihood of undergoing limb salvage through revascularization before amputation.<sup>6,7</sup>

Unfortunately, despite several decades' awareness of the presence of racial disparities in the use of major procedures, efforts to reduce racial disparities for surgical care have been largely unsuccessful.<sup>8</sup> This may be because our understanding of the cause of disparities is incomplete. One possibility is that site of care matters. For procedures with established volume-outcome relationships, black patients are more likely to receive care from low-volume hospitals and surgeons.<sup>9-12</sup> Prior studies in the medical literature have shown that care for minorities is highly concentrated, and that hospitals serving a high proportion of minority patients may provide lower-quality care.<sup>13,14</sup> Alternatively, surgical readmissions may be largely related to patient factors such as socioeconomic status, as has been argued in the medical literature.<sup>15</sup>

The importance of quantifying and understanding racial disparities in readmissions following a surgical procedure is made even more salient as the Hospital Readmissions Reduction Program (HRRP) administered by the Centers for Medicare and Medicaid Services (CMS) expands to penalize hospitals with high readmission rates for vascular procedures and surgical care. In this context, understanding the differential contributions of race versus site of care to surgical readmissions is critically important to predicting the potential impact of these penalties on vulnerable populations. Further, understanding whether disparities are primarily due to race, site of care, or socioeconomics could help clinical leaders more effectively craft interventions to ameliorate them.

Therefore, in this study, we sought to answer three main questions. First, do racial disparities exist for surgical readmissions across a wide range of common surgeries? Second, if these disparities are present, are they primarily related to race, or are they primarily related to the hospitals at which care is received? Lastly, if racial disparities in surgical readmissions exist, are they mediated by the effect of poverty?



## Methods

### Data

Medicare Provider Analysis Review (MedPAR) 100% files from 2007-2010 were used to examine all inpatient hospitalizations for Medicare fee-for-service beneficiaries aged 65 years or older with International Classification of Diseases, Ninth Edition (ICD-9) procedure codes corresponding to coronary artery bypass graft (CABG), pulmonary lobectomy, endovascular abdominal aortic aneurysm repair (EVAR), open abdominal aortic aneurysm repair (AAA), colectomy, or hip replacement (Appendix Table 1), which we selected because they were common and costly within the Medicare population. Patients discharged from federal hospitals (such as Veterans Affairs facilities) and hospitals outside the 50 U.S. states and Washington D.C. were excluded; no exclusions based on minimum procedural volume were applied. Patients with procedures occurring during December of each year were excluded because information on full 30-day follow-up was not available. Patient race was categorized based on self-report from the Medicare data, and patients' Medicaid status was determined using the state Medicaid buy-in variable. As has been convention in other studies, non-black patients were categorized as white.<sup>8,16, 17</sup>

The 2010 American Hospital Association survey was used to identify hospital characteristics including size, teaching status, ownership, and location. Hospitals' Disproportionate Share Index (a marker of hospitals caring for the poor) was obtained from the Medicare Impact file. Hospitals' performance on quality measures was examined using publicly available Hospital Compare data, which contains a surgical process measure summary score based on the commonly accepted Surgical Care Improvement Project (SCIP), a set of best-practice guidelines.

### Identifying Minority-Serving Hospitals

For each hospital in our dataset, the proportion of Medicare discharges for black patients was calculated. Hospitals in the highest decile were designated as minority-serving hospitals, and the other 90% were categorized as non-minority-serving. As a sensitivity analysis, alternative thresholds including the highest quartile were used; results were similar, so only results defining minority-serving as the top decile are presented.

### Outcome

The primary outcome for this study was risk-adjusted odds of all-cause 30-day readmission, which was calculated using the Medicare data. Each patient's likelihood of readmission was adjusted using the Elixhauser risk-adjustment scheme, which is a validated tool developed by the Agency for Healthcare Research and Quality (AHRQ) to be used with administrative data (Appendix Table 2).

### Analysis

All analyses were conducted at the patient level. Characteristics of black versus white patients and minority versus non-minority-serving hospitals were first compared using Wilcoxon tests for continuous data and chi-squared tests for categorical data. We first calculated unadjusted 30-day readmission rates for black versus white patients and for

patients at minority-serving versus non-minority-serving hospitals, using only patients surviving to discharge as the denominator.

Multivariate patient-level logistic regression models using a generalized estimating equation with independent correlations were then created to calculate risk-adjusted odds of readmission, accounting for clustering at the hospital level. Race and site of care were both included in the risk-adjusted model to evaluate the independent contributions of each predictor to 30-day readmissions. The type of surgical procedure was also included in the multivariate logistic regression models to adjust for potential differences in procedure rates for black and white patients.

Patients were then categorized into four analytic groups: black patients at minority-serving hospitals, white patients at minority-serving hospitals, black patients at non-minority-serving hospitals, and white patients at non-minority-serving hospitals. White patients at non-minority-serving hospitals served as the reference group. We then ran three separate models examining the relationships between these four analytic groups and risk-adjusted odds of 30-day readmission: the Risk-Adjusted Model adjusts for patient comorbidities only, the Quality-Adjusted Model additionally adjusts for hospital quality using the HQA surgical score, and the Poverty-Adjusted Model adjusts for individual Medicaid status to evaluate if the effects of race were mediated by poverty.

### Sensitivity Analyses

We performed several sensitivity analyses. Based on prior research demonstrating that black patients receive surgery at lower-volume hospitals than white patients, we conducted analyses adjusting for hospital volume. Because of concern that black and white patients might differ in their indications for certain procedures, we repeated our analyses limiting our patient population to those patients with the following procedure-specific diagnoses: patients with isolated CABG, lung cancer for pulmonary lobectomy, non-ruptured aneurysms for EVAR and AAA, and colon cancer for colectomy. In order to account for competing risks, and the possibility that differences in readmission rates for black patients were related to differential survival to discharge, we also repeated our analyses examining the composite outcome of 30-day death or readmission rather than readmission alone. To explore the robustness of our results, we explored alternate classifications of race by comparing black to white patients and excluding other minority patients. Additionally, given the known overlap between safety net and public hospitals with minority-serving hospitals, we also performed analyses defining site of care by safety net status and public ownership. For this set of analyses, we used the Disproportionate Share (DSH) index from the Medicare Impact file and defined the highest quartile of DSH index as safety net hospitals, in a similar methodology to existing literature.<sup>18</sup>

A two-sided p-value of less than 0.05 was considered to be significant. All statistical analyses were performed using Stata version 12 (StataCorp, College Station, Texas). This study was granted exemption by the Harvard School of Public Health Institutional Review Board.

## Results

### Patient characteristics

Between 2007 and 2010, there were 1,508,402 admissions following the six index procedures of coronary artery bypass graft, pulmonary lobectomy, endovascular abdominal aortic aneurysm repair, open abdominal aortic aneurysm repair, colectomy, or hip replacement. Our analytic dataset comprised the 1,458,833 of patients who survived to discharge and were eligible for a potential readmission. 78,567 (5.4%) of these discharges were for black patients and 1,380,266 (94.6%) were for white patients. Black patients were younger, more likely to be female, and more often had medical comorbidities including congestive heart failure (7.2% vs. 6.6%), diabetes (28.0% vs. 18.2%), hypertension (68.6% vs. 59.9%), and chronic kidney disease (13.3% vs. 6.9%, Table 1). Black patients were also more likely to be Medicaid-eligible and have longer lengths of stay. 32.0% of black patients underwent procedures at minority-serving hospitals compared to 4.8% of white patients.

### Characteristics of Minority and Non-Minority Serving Hospitals

Of the 3,121 hospitals in our sample, 312 (10.3%) were classified as minority-serving hospitals. The median proportion of black patients at minority-serving hospitals was 37.7% compared to 3.0% for non-minority-serving hospitals. 60.7% of minority-serving hospitals were located in the South compared to 39.3% of non-minority-serving hospitals. Minority-serving hospitals were more likely to also be safety-net hospitals, with an average CMS-designated disproportionate share index of 0.41 compared to 0.22 for non-minority-serving hospitals (Table 2).

### Readmissions by Race and Site of Care

Examining all discharges for the procedures of interest, the overall unadjusted readmission rate for all patients in our sample was 12.9%. Unadjusted readmission rates for black patients were 16.0% compared to 12.7% for white patients ( $p < 0.001$ , Table 3), and unadjusted readmission rates for patients at minority serving hospitals were 15.3% compared to 12.7% for patients at non-minority serving hospitals ( $p < 0.001$ ).

When we created a single model adjusting for patient comorbidities, procedure type, and race, as well as site of care, we found that black patients had a risk-adjusted readmission rate of 14.8% compared to 12.8% for white patients (OR 1.19, 95% CI 1.16-1.22,  $p < 0.001$ ). Similarly, patients undergoing procedures at minority-serving hospitals had higher risk-adjusted readmission rates than those undergoing procedures at non-minority-serving hospitals (14.3% vs. 12.8%, OR 1.14, 95% CI 1.09-1.19,  $p < 0.001$ ).

When we categorized patients into four groups by race and site of care, using white patients at non-minority-serving hospitals as our reference group, we found that black patients at minority-serving hospitals had the highest odds of readmission (OR 1.34, 95% CI 1.28-1.42,  $p < 0.001$ , Table 4). White patients at minority-serving hospitals (OR 1.15, 95% CI 1.09-1.20,  $p < 0.001$ ) and black patients at non-minority-serving hospitals (OR 1.20, 95% CI 1.16-1.23,  $p < 0.001$ ) also had higher odds of readmission than the reference group. Patterns for each of the individual procedures were similar to the overall analysis; for all procedures except for

pulmonary lobectomy, black patients at minority serving hospitals had the highest odds of readmission (Appendix Table 3).

### Hospital Quality, Poverty, and Readmissions

Adding hospital quality to the readmissions model, as measured by the Hospital Compare surgical quality measure, did not meaningfully change the odds of readmissions for any of the groups (Table 4). When we examined the association between poverty and readmissions, we found that patients eligible for Medicaid had an odds ratio of 1.38 (95% CI 1.35-1.40,  $p<0.001$ ) for 30-day readmission. Adding poverty to our main models somewhat decreased the odds of readmission for black patients at both minority-serving (OR 1.25, 95% CI 1.19-1.32,  $p<0.001$ ) and non-minority serving hospitals (OR 1.12, 95% CI 1.09-1.15,  $p<0.001$ ), yet both race and site of care remained independent predictors of increased odds of readmission. Odds of readmission for white patients were unchanged when Medicaid eligibility was added to the model (OR 1.14, 1.09-1.20, Table 4).

### Sensitivity Analyses

Adjusting for hospital volume (Appendix Table 4) and including patients based on specific diagnoses in addition to procedure codes to ensure homogenous samples (Appendix Table 5) did not quantitatively change the results. In order to assess for competing risks and to determine if the effects seen were due to differential survival to discharge, we further examined odds of either 30-day death or readmission as our outcome; the overall patterns were similar but with an even greater magnitude, with black patients at minority-serving hospitals again having the highest odds of readmission or death (OR 1.63, 95% CI 1.51-1.77,  $p<0.001$ , Appendix Table 6). Adding hospital characteristics to our models did not meaningfully impact the results (Appendix Table 7). When we reran analyses comparing black patients and white patients without including the non-black patients in the white category, the overall results were identical. Lastly, we explored alternate definitions of minority-serving hospitals by performing multivariate regressing using the hospital level-characteristics of safety net status and public ownership. The overall patterns were similar in safety net hospitals with black patients (OR 1.30, 95% CI 1.25-1.36,  $p<0.001$ ) having the highest odds of readmission (Appendix Table 8). Site of care as determined by public ownership did not mediate racial disparities.

### Discussion

We found that black patients had higher odds of 30-day readmission than white patients following a discharge for a surgical procedure. This disparity was related to the independent impact of race as well as to the site of care where patients underwent their surgery. The effects persisted even when accounting for hospital quality and poverty, as measured by Medicaid eligibility.

The mechanisms underlying the disparities we found are likely complex. The fact that both race and site of care were independent predictors of readmission suggest that both patient-level and hospital-level factors are important to consider when trying to understand racial disparities in this and other health outcomes. Black race was associated with a higher



readmission rate; black patients may have received poorer-quality care in the hospital than their white counterparts,<sup>11,19,20</sup> or they may have had worse access to important resources in the outpatient setting that might help prevent readmissions.<sup>21</sup>

We also found that hospitals serving a high proportion of minority patients had higher readmission rates for both their black patients and their white patients, suggesting that hospital factors are also important in readmissions. These hospitals may differ structurally from those with fewer minorities; however, adjusting for hospital characteristics such as teaching status, size, ownership, and region did not qualitatively change our results. Similarly, adjusting for measured hospital quality or hospital volume did not explain our findings. This suggests that other, unmeasured differences between the two types of hospitals may be linked to outcomes. One such difference may be a differential quality of transitional care between these two types of hospitals; however, the evidence that high-quality transitional care can prevent readmissions is mixed.<sup>22-24</sup> Another possibility is that the differences we see between minority-serving and non-minority-serving hospitals are due to community factors such as the availability of primary care and other post-discharge resources.

We found that poverty partially mediated the racial disparities in our study. Adjusting for Medicaid eligibility at the patient level diminished the differences in readmission rates somewhat for black patients, though it had no significant impact for white patients. Socioeconomic status has been shown to be linked to worse surgical outcomes<sup>25,26</sup> as well as lower healthcare utilization.<sup>27</sup> Our study adds the additional insight that poor, black patients at minority-serving hospitals represent the apex of vulnerability, and suggests this population should be of special emphasis in efforts to reduce disparities through increased access to care as well as targeted discharge planning.

While outcomes such as perioperative mortality have been well-studied, only a limited literature exists examining racial disparities in readmissions for surgical patients.<sup>28</sup> Prior studies examining racial disparities in medical discharges similarly reported that black patients had higher readmission rates than white patients, and our findings deepen the insights gained from this prior work.<sup>17,29</sup> For several major surgical procedures, including major cancer operations,<sup>4,30</sup> vascular surgery,<sup>6,11,31</sup> and CABG,<sup>32</sup> black patients have been shown to have worse outcomes than white patients. Recent studies have also demonstrated that in segregated areas, black patients more often receive care at low-quality institutions.<sup>33</sup> Our study extends these findings to disparities in readmission rates, another important clinical outcome.

There are limitations to our study. We used administrative data for risk adjustment; although we used a standard and widely-accepted methodology, our models may nevertheless not fully account for variations in comorbidities and illness severity across racial and hospital groups. We lacked data on discharge planning and the use of specific care transitions practices across the hospitals and could not assess if this contributed to our observed results. Because we used Medicare data, our findings are limited to patients over the age of 65 and may not be applicable to other patient populations. As with all observational studies, we could not assess whether the relationships we found in our study were causal or only

correlative. Further research using clinical databases or qualitative methods may be needed in order to fully explore the mechanisms that may underlie the disparities observed in our study.

In summary, among elderly Medicare beneficiaries, black patients were more likely to be readmitted after hospitalization following surgical procedures. Since racial disparities in readmission rates are mediated by both patients' race and the hospital at which care is delivered, efforts at reducing disparities should not only focus on race-based measures, but also should focus on improving outcomes of care at minority-serving hospitals.

## Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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**Table 1**

Characteristics of Black and Non-Black Patients Undergoing Major Surgery Legend:

	<b>Black (n=78,567)</b>	<b>White (n=1,380,266)</b>	<b>P- value</b>
<b>AGE, median (IQR)</b>	74 [69, 80]	76 [70, 82]	<0.001
<b>SEX</b>			
Male	41.5%	45.9%	<0.001
<b>COMORBIDITIES</b>			
Congestive Heart Failure	7.2%	6.6%	<0.001
Diabetes without complications	24.9%	16.5%	<0.001
Diabetes with complications	3.1%	1.7%	<0.001
Hypertension	68.6%	59.9%	<0.001
Chronic Kidney Disease	13.3%	6.9%	<0.001
Chronic Pulmonary Disease	14.8%	17.8%	<0.001
Depression	2.3%	5.2%	<0.001
Obesity	7.1%	5.3%	<0.001
Medicaid Eligible	30.7%	10.3%	<0.001
Discharged from Minority-Serving Hospital	32.0%	4.8%	<0.001
Length of Stay (Days)	9.8	7.5	<0.001
<b>PROCEDURE</b>			
CABG	19.6%	20.0%	0.009
Lobectomy	3.7%	3.4%	<0.001
EVAR	4.3%	5.4%	<0.001
AAA	1.2%	1.6%	<0.001
Colectomy	34.3%	21.9%	<0.001
Hip Replacement	36.8%	47.7%	<0.001

AAA = abdominal aortic aneurysm; CABG = coronary artery bypass grafting; EVAR = endovascular aneurysm repair; IQR = interquartile range.



**Table 2**

Characteristics of Minority-Serving and Non-Minority-Serving Hospitals Legend:

	Minority Serving (n= 312)	Non-Minority Serving (n=2809)
<b>HOSPITAL SIZE</b>		
Small	16.4%	29.5%
Medium	58.0%	57.4%
Large	25.6%	13.1%
<b>OWNERSHIP</b>		
For-profit	21.5%	20.4%
Non-profit	54.2%	65.1%
Public	24.4%	14.6%
<b>SETTING</b>		
Urban	89.7%	91.9%
<b>TEACHING STATUS</b>		
Teaching Hospital	23.7%	7.2%
<b>LOCATION</b>		
Northeast	14.5%	16.2%
Midwest	18.7%	24.0%
South	60.7%	39.3%
West	6.1%	20.6%
ICU	77.6%	80.3%
Percentage Black, %	37.7 [30.5, 52.8]	3.0 [0.8, 7.9]
Disproportionate Share Index, %	0.41 [0.30, 0.55]	0.22 [0.16, 0.31]
Percent Medicaid, %	21.9 [17.4, 32.1]	17.0 [11.3, 20.9]
Nurses per 1000 patient days	5.7 [4.6, 7.1]	6.8 [5.4, 8.7]
HQA Surgery Score	95.9 [92.7, 97.6]	96.3 [94.2, 97.7]

ICU = intensive care unit. HQA = Hospital Quality Alliance

**Table 3**

Risk-Adjusted Odds of 30-Day Readmission by Race and Site of Care Legend:

	No. of Patients	Unadjusted Readmission Rate	Adjusted Readmission Rate, Mean (95 % CI)	Adjusted Odds Ratio (95% CI)
<b>RACE</b>				
<b>Black</b>	78,567	16.0%	14.8% (14.5%, 15.1%)	1.19 (1.16, 1.22)
<b>White</b>	1,380,266	12.7%	12.8% (12.6%, 12.9%)	Ref
<b>SITE OF CARE</b>				
<b>Minority-Serving Hospital</b>	91,907	15.3%	14.3% (13.8%, 14.8%)	1.14 (1.09, 1.19)
<b>Non-Minority-Serving Hospital</b>	1,366,926	12.7%	12.8% (12.7%, 12.9%)	Ref

Readmission rate calculations include only patients surviving to discharge (1,458,833 patients) in denominator. Model adjusts for patient characteristics, procedure type, and simultaneously includes both race and site of care.

**Table 4**

Risk-adjusted Odds of 30-Day Readmission by Patient Groups Legend:

	<b>Risk-Adjusted Model</b>	<b>P-value</b>	<b>Quality-Adjusted Model**</b>	<b>P-value</b>	<b>Poverty-Adjusted Model***</b>	<b>P-value</b>
<b>MINORITY-SERVING</b>						
<b>Black</b>	1.34 (1.28, 1.42)	<0.001	1.34 (1.27, 1.41)	<0.001	1.25 (1.19, 1.32)	<0.001
<b>White</b>	1.15 (1.09, 1.20)	<0.001	1.14 (1.09, 1.20)	<0.001	1.14 (1.09, 1.20)	<0.001
<b>NON- MINORITY SERVING</b>						
<b>Black</b>	1.20 (1.16, 1.23)	<0.001	1.20 (1.16, 1.23)	<0.001	1.12 (1.09, 1.15)	<0.001
<b>White</b>	Ref	Ref	Ref	Ref	Ref	Ref

\* Risk-adjusted model controls for age, sex, comorbidities, procedure, race, and site of care

\*\* Quality-adjusted model controls for variables in the risk-adjusted model plus HCA surgical score

\*\*\* Poverty-adjusted model controls for variables in risk-adjusted model plus patient-level Medicaid eligibility

# The CMS Equity Plan for Improving Quality in Medicare



Centers for Medicare & Medicaid Services  
Office of Minority Health  
September 2015



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# Introduction

The Centers for Medicare & Medicaid Services (CMS) Equity Plan for Improving Quality in Medicare (*CMS Equity Plan for Medicare*) provides an action-oriented, results-driven approach for advancing health equity by improving the quality of care provided to minority and other underserved Medicare beneficiaries. The CMS Office of Minority Health (CMS OMH), in collaboration with NORC at the University of Chicago, produced this plan as part of its broad range of work to achieve health equity. The purpose of the *CMS Equity Plan for Medicare* is to better position CMS to support Quality Improvement Networks and Quality Improvement Organizations (QIN-QIOs); Hospital Engagement Networks (HENs); federal, state, local, and tribal organizations; providers; researchers; policymakers; beneficiaries and their families; and other stakeholders in activities to achieve health equity. The priorities and activities described in this document were identified during a year-long process which included examining the evidence base, identifying opportunities, and gathering stakeholder input.

## *Why do we need a CMS Equity Plan for Medicare?*

As health care delivery system reform continues, CMS has an important opportunity and a critical role to play in promoting health equity. Across the agency, CMS uses policy levers and program authorities to develop innovative solutions that support access to high quality care, promote health care system efficiency, and ensure affordable health coverage. Simultaneously, the agency is committed to leveraging its unique role to encourage action among stakeholders and partners to fulfill the health equity goals set forth in the *U.S. Department of Health and Human Services (HHS) Action Plan to Reduce Racial and Ethnic Disparities* (HHS Disparities Action Plan), the *CMS Strategy*, and the *CMS Quality Strategy*. In line with CMS' continuous drive toward quality improvement, the *CMS Equity Plan for Medicare* outlines the agency's path to sustained progress in advancing health equity for Medicare beneficiaries.

## *Who does the plan impact?*

This plan focuses on Medicare populations that experience disproportionately high burdens of disease, worse quality of care, and barriers to accessing care. For CMS, these populations include racial and ethnic minorities, sexual and gender minorities, persons with disabilities, as well as individuals living in rural areas. The *CMS Equity Plan for Medicare* was also developed with particular attention to disparities in chronic diseases such as diabetes, chronic kidney disease, and cardiovascular disease. Chronic conditions pose a significant human and financial burden, are prevalent in the Medicare population, and are likely to co-occur. Further, these chronic diseases represent important areas of focus for the QIN-QIOs.

## *How did we develop the CMS Equity Plan for Medicare?*

We created a unifying framework to guide the development, implementation, and evaluation of the priorities and activities in the *CMS Equity Plan for Medicare*. The framework consists of three interconnected domains which provide a foundation for the plan's priorities and activities. The domains include: increasing **understanding and awareness** of disparities, creating and

sharing **solutions**, and accelerating implementation of effective **actions**. This framework, detailed in the following section, recognizes that achieving equity will require a continuous improvement cycle — filling knowledge gaps, identifying best practices, and supporting action, then coming back full circle to monitor improvements and change, identify new gaps, and begin the improvement cycle again.

We identified six high-impact priority areas based on a review of the evidence base and stakeholder input. We evaluated potential areas of focus within CMS' purview and aligned with existing CMS and HHS initiatives, paying particular attention to how CMS could further support QIN-QIOs. The set of six priority areas are listed in **Exhibit 1** and described below. These priorities encompass both system- and community-level approaches to achieve equity in Medicare. We are developing specific activities within each priority area. Activities will fall into the domains in our framework—**understanding and awareness**, **solutions**, and **actions**—giving focus to our vision and measures of success.

### *How will we measure success?*

In order to assess and document our progress towards increasing equity in Medicare quality, we will design a robust evaluation, tailored to the priorities and specific activities implemented from the *CMS Equity Plan for Medicare*. The evaluation will align with and reflect each level of our equity framework of **understanding and awareness**, **solutions**, and **actions**. We will identify, establish, and track specific performance metrics to assess progress across priorities and activities. Inherent in this evaluation is a continuous quality improvement process and feedback loop that will be used to make changes, when needed, and show improvement over time.

#### **Exhibit 1: CMS Equity Plan for Medicare Priority Areas**

**Priority 1:** Expand the Collection, Reporting, and Analysis of Standardized Data

**Priority 2:** Evaluate Disparities Impacts and Integrate Equity Solutions Across CMS Programs

**Priority 3:** Develop and Disseminate Promising Approaches to Reduce Health Disparities

**Priority 4:** Increase the Ability of the Health Care Workforce to Meet the Needs of Vulnerable Populations

**Priority 5:** Improve Communication and Language Access for Individuals with Limited English Proficiency and Persons with Disabilities

**Priority 6:** Increase Physical Accessibility of Health Care Facilities

## Strategic Approach

The United States has made progress towards improving health care quality, but well-documented disparities persist for racial and ethnic minorities, and the health care system does not fully address the needs of sexual and gender minorities or persons with disabilities. Reducing disparities is identified as a priority, in the *HHS Disparities Action Plan*, Healthy People 2020, the *2013 HHS Language Access Plan* (HHS Language Access Plan), the *CMS Strategy*, the *CMS Quality Strategy*, and key provisions in the Affordable Care Act (ACA). CMS can continue to move the nation toward health equity by identifying and disseminating new and promising practices, leveraging existing work to increase our impact on health equity, facilitating

knowledge sharing and collaboration among stakeholders, and engaging with new audiences to expand the network of stakeholders working to achieve equity. In particular, CMS can leverage the ongoing efforts of QIN-QIOs to support and amplify programs that have been proven to reduce disparities.

## ALIGNMENT WITH CMS GOALS

The CMS Quality Strategy details agency priorities for quality improvement and identifies the elimination of disparities as one of four foundational principles. The *CMS Equity Plan for Medicare* sets forth a plan for CMS to meet this objective. **Exhibit 2**<sup>1</sup> presents the goals and foundational principles of the CMS Quality Strategy.

The *CMS Equity Plan for Medicare* also addresses the other foundational principles, particularly strengthening infrastructure and data systems. Being able to monitor trends in quality of care and health outcomes is essential to achieving health equity in priority populations and disease areas.

## CMS LEVERS

The *CMS Equity Plan for Medicare* will effect change through several important mechanisms. This set of levers, unique to CMS, encompasses the core CMS functions and resources the agency and stakeholders will use to implement the *CMS Equity Plan for Medicare*. The levers include:

- ▶ QIN-QIOs
- ▶ CMS Programs
- ▶ Policy
- ▶ Data
- ▶ Access to Stakeholders
- ▶ Communication Tools

## GUIDING FRAMEWORK

The three interconnected domains of our guiding framework provide a foundation for the plan's priorities and activities. We envision this framework as a cycle of quality improvement, continuously driving toward better **understanding and awareness** of disparities, identifying and creating **solutions** based on that understanding, and accelerating the implementation of measurable **actions** to achieve health equity. Throughout this process, we will evaluate, adjust, and revise our process to continue advancing equity in Medicare quality.

**Exhibit 2: CMS Quality Strategy Goals**





The **understanding and awareness** domain is focused on:

- ▶ Increasing understanding and awareness of disparities
- ▶ Improving understanding of why disparities matter and why it is important to address them
- ▶ Enhancing understanding of the causes of disparities
- ▶ Identifying knowledge gaps

The **solutions** domain is focused on:

- ▶ Creating new solutions based on our understanding of disparities
- ▶ Testing promising strategies and interventions
- ▶ Sharing tools with stakeholders

The **actions** domain is focused on:

- ▶ Garnering support and action from a variety of stakeholders
- ▶ Supporting stakeholders in their efforts to achieve health equity
- ▶ Making adjustments for continued success
- ▶ Ensuring actions are sustained over time

## MEASURING SUCCESS IN THE CMS EQUITY PLAN FOR MEDICARE

We will measure the success of the *CMS Equity Plan for Medicare* using our framework as a guide. To monitor our progress toward increasing equity in Medicare quality, we have developed three interconnected evaluation questions:

1. How are the activities in the *CMS Equity Plan for Medicare* increasing **understanding and awareness** of disparities and their causes?
2. How are the activities in the *CMS Equity Plan for Medicare* creating, testing, and implementing **solutions** to advance health equity in Medicare quality?
3. How are the activities in the *CMS Equity Plan for Medicare* leading to **actions** that advance equity in Medicare quality?

To measure progress in the *CMS Equity Plan for Medicare*, we will implement two levels of monitoring and evaluation and answer the three evaluation questions to assess how we are doing in increasing equity **understanding and awareness**, **solutions**, and **actions**. Monitoring and evaluation activities will occur at the priority and activity levels, to give us a micro and macro view of our progress.

### Priority-Level Evaluation

We will assess the extent to which progress is being made in the six priority areas as they relate to the framework. Specifically, for each priority area, we will identify measures to track progress towards increasing **understanding and awareness** of disparities and their causes; creating, testing and implementing **solutions**; and galvanizing **actions** to achieve health equity:

- ▶ **Measures for increasing understanding and awareness of disparities** may include the number and types of stakeholders that have participated in activities within the priority area; the number of people reached through outreach and engagement; and the awareness and reach of existing tools, products, and data.
- ▶ **Measures for creating, testing, and implementing solutions to achieve equity in Medicare quality** may include the number and types of new tools, products, data, and other programs and initiatives that are developed, implemented, and disseminated to empower stakeholders to promote equity in Medicare quality for different priority populations.
- ▶ **Measures for increasing actions to achieve equity in Medicare quality** may include the number of providers and organizations (including QIN-QIOs) participating or collaborating in health equity activities; the implementation of new programs; and the utilization of new tools, data, and products by different stakeholders.

### Activity-level Monitoring and Evaluation

At the activity level, we will conduct monitoring and process evaluations to assess the implementation of the activities. We will identify, establish, and track specific measurable milestones and performance metrics for each activity. This will enable us to ensure progress is being made on each activity and quickly identify when a mid-course correction is needed. Further, we will establish a baseline for activities that will be drawn from existing data sets as well as newly created data. We will conduct process evaluations for all activities, and outcome evaluations for activities when possible. Process evaluations will explore whether activities are implemented as planned and have made progress towards achieving the goals of the six priority areas. We will utilize process measures to assess progress as well as any barriers. Outcome evaluations will assess the changes that have resulted from some of the activities. The evaluations will require extensive coordination and cooperation of the different stakeholders involved in the activities.

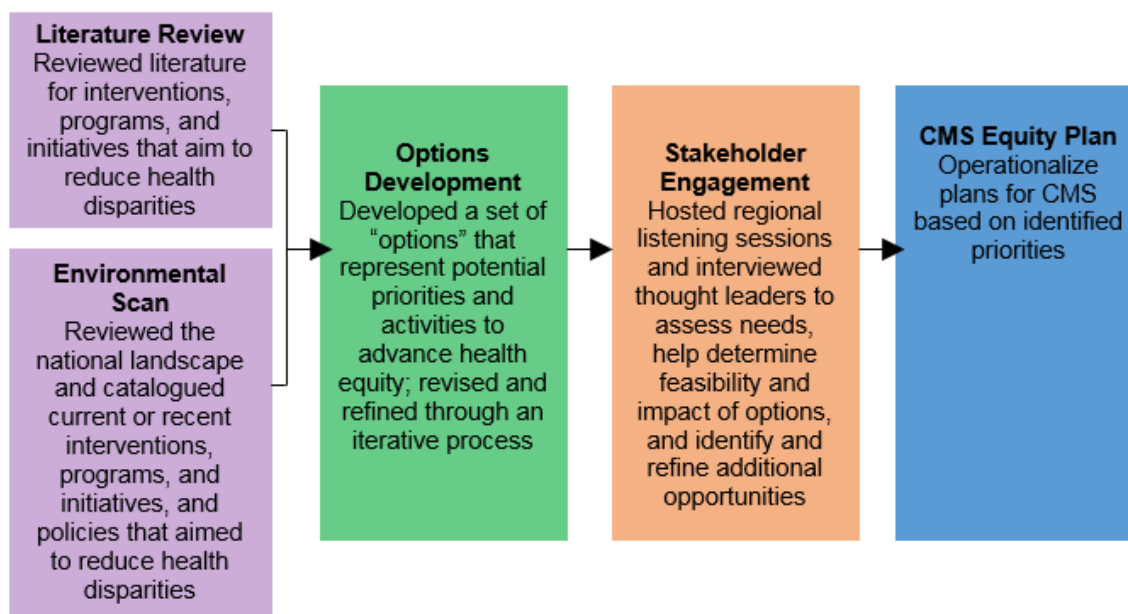
Finally, both levels of evaluation will incorporate opportunities for continuous quality improvement. We will use the Plan-Do-Study-Act framework to rapidly integrate learning generated through the priorities and activities, make changes when needed, and show improvements over time. This evaluation approach will help us to assess and document our progress toward achieving equity in Medicare quality through the *CMS Equity Plan for Medicare*.

## Methodology

This section describes the process by which we developed the *CMS Equity Plan for Medicare*. First, we conducted a thorough literature review and environmental scan. The literature review identified evidence-based health care interventions, quality improvement programs, and initiatives with potential to reduce disparities among racial and ethnic minorities, sexual and gender minorities, and persons with disabilities. Likewise, the environmental scan identified promising health care interventions, programs, and initiatives, as well as policies stemming from

the 2010 passage of the ACA. Next, we developed a set of “options,” representing potential actions CMS could take to reduce health disparities. We refined these options with input from stakeholders in a series of regional listening sessions across the U.S., as well as interviews with national thought leaders. Exhibit 3 provides a flowchart of our process.

### Exhibit 3: CMS Equity Plan for Medicare Development Methodology Flowchart



We gathered input from a variety of stakeholders to ensure that the identified options were meaningful and would make an impact. We engaged with visionaries and thought leaders in health equity, as well as experts in CMS programs and levers. We sought their perspectives on:

- ▶ The most significant disparities in health care quality, and the drivers of those disparities;
- ▶ Barriers to implementing successful strategies to reduce disparities;
- ▶ Promising practices not yet reflected in the published literature;
- ▶ Opportunities for CMS to accelerate equity action; and
- ▶ Potential partners for CMS to advance this goal.

We collected stakeholder feedback through two main mechanisms: structured phone interviews with nationally renowned thought leaders and five listening sessions. We identified participants with a broad range of expertise and specifically included individuals who represent the perspectives of QIN-QIOs, as well as CMS and HHS regional office staff. By ensuring diversity among participants, we successfully gained input from an array of individuals with both a connection to health disparities work and knowledge of CMS programs. Stakeholder input supplemented findings from the literature review and environmental scan of what work has been implemented, what work is most likely to effect change, and how to effectively measure success. A total of 93 experts participated in these stakeholder engagement activities. **Exhibit 4** describes the participants’ professional perspectives.

We asked stakeholders to rate, rank, and discuss options based on their perspective of the options' potential impact on health disparities and their alignment with CMS priorities and levers. Further, we asked participants to suggest how the options could be refined to increase their impact on health equity, suggest which activities were of least impact and importance, and identify topics that were not addressed in the options presented to them.

#### Exhibit 4: Roles of Listening Session Participants

- ▶ QIN-QIO Staff
- ▶ Researchers
- ▶ Health Educators
- ▶ Health Care Providers
- ▶ Health Insurers
- ▶ Community Based Organization Representatives
- ▶ Hospital System Leadership
- ▶ CMS and HHS Regional Office Staff
- ▶ State, Local and Federal Health Officials
- ▶ Advocates & Organizations Representing Priority Populations
- ▶ Health Care Professional Organizations

Based on the collective stakeholder feedback, the project team identified six priority areas and several high-yield activities as the foundation of the *CMS Equity Plan for Medicare*.

## Overview of CMS Equity Plan for Medicare Priorities

Over the past year, we developed a core set of quality improvement priorities that target the individual, interpersonal, organizational, community, and policy levels of the United States health system in order to achieve equity in Medicare quality. The six priorities described below were developed with significant input and feedback from national and regional stakeholders and reflect our guiding framework of **understanding and awareness**, **solutions**, and **actions**. They provide an integrated approach to build health equity into existing and new efforts by CMS and stakeholders.



## PRIORITY 1: EXPAND THE COLLECTION, REPORTING, AND ANALYSIS OF STANDARDIZED DATA

Priority 1 focuses on increasing **understanding and awareness** of the value of collecting and analyzing standardized patient data, and developing **solutions** and tools for stakeholders to collect and analyze local data and pinpoint needs and health disparities in their communities.



A growing body of literature suggests that increasing the collection of standardized demographic and language data across health care systems is an important first step towards improving population health.<sup>2</sup> Comprehensive patient data, including race, ethnicity, language, sexual orientation, gender identity, and disability status are required to plan for quality improvements, and to address changes among the target populations over time. The ACA requires that federally conducted or supported health care and public health programs, as well as government surveys and other activities, to the extent practicable, collect data on race, ethnicity, sex, disability status and primary language.<sup>3</sup> Developments in health information technology have significantly increased the feasibility of measuring disparities at the provider level as well as the capacity to do so.<sup>4</sup> Further, the need for complete and accurate demographic data is being promoted widely within the provider community, encouraged by federal programs and policies (e.g. the HHS Disparities Action Plan and the Overarching Secretarial Priorities) and through meaningful use incentives.<sup>5</sup>

Though research has identified evidence-based guidelines and practices for improving the collection of data on race, ethnicity, language, and disability status in health care settings, these guidelines are often not readily available to health care providers and staff. Preliminary research has been conducted to determine best practices for collecting sexual orientation and gender identity information in some populations, but currently there are no evidence-based guidelines to standardize this collection.

### Example Activity: Mapping Medicare Disparities Tool

This mapping tool identifies areas of large disparities in chronic diseases between racial and ethnic groups. It presents various chronic disease-related measures by state, county, age, gender, and Medicare-Medicaid dual eligibility status. The tool presents descriptive statistics on a dynamic, publicly available Web interface.

We will facilitate quality improvement efforts by disseminating best practices for the collection, reporting, and analysis of standardized data on race, ethnicity, language, sexual orientation, gender identity, and disability status so that stakeholders are able to identify and address the specific needs of their target audience(s) and monitor health disparities. Through enhanced data collection, reporting, and analysis, resources can be better allocated to meet needs.

## PRIORITY 2: EVALUATE DISPARITIES IMPACTS AND INTEGRATE EQUITY SOLUTIONS ACROSS CMS PROGRAMS

Priority 2 focuses on increasing **understanding** of the impact CMS programs have on health disparities and on identifying, developing, and integrating proven **solutions** to improve their impact on vulnerable populations.



The ACA included a number of provisions that have created new opportunities to advance health equity through federal infrastructure, data collection, quality improvement, and research.<sup>6</sup> CMS programs foster the health and well-being of millions of Americans, making the agency a critical engine for these far-reaching reforms. Several CMS programs and initiatives, including the QIO program's 11th (current) scope of work and the *CMS Quality Strategy*, have incorporated health equity as a goal or foundational principle, recognizing the critical role health equity plays in better care, better outcomes, and system savings. According to the *HHS Disparities Action Plan*, creating objectives for health care programs that contribute to the reduction of health disparities will shift the balance from addressing health issues in silos to creating population-wide health improvements for communities experiencing health disparities.<sup>7</sup> However, CMS has not yet established a consistent way to assess its programs' impact on health equity.

We will work across CMS and with our stakeholders to understand the impact of existing programs on vulnerable Medicare populations and to ensure that new programs do not make disparities worse. Further, we will identify best practices for reducing disparities and integrate these practices into CMS programs to promote equity. As we develop tools that work, we will spread them across the enterprise, making these solutions available to existing and new CMS programs so they may improve their own impact on health equity.

### Example Activity: Disparities Impact Statements

Disparities Impact Statements can be used to ensure that vulnerable populations are included in pilot programs, and that disparities are not worsened as a result of new initiatives. Federal agencies including the Substance Abuse and Mental Health Services Administration and the Health Resources and Services Administration currently use these tools to monitor programs' impact on health disparities.

Working across the agency to integrate proven solutions into CMS programs creates a framework for us to work with programs, grantees, and other partners to systematically advance equity in Medicare quality and reduce health disparities.

### PRIORITY 3: DEVELOP AND DISSEMINATE PROMISING APPROACHES TO REDUCE HEALTH DISPARITIES

Priority 3 uses CMS' role as a leader in quality improvement to develop promising **solutions** for improving equity in Medicare quality, and to foster **actions** to replicate and adapt effective models and strategies. We will focus on identifying promising approaches to reduce disparities, with CMS priorities in mind. National and regional stakeholders discussed the need for more guidance in 1) how to reduce readmissions among vulnerable persons with multiple chronic conditions such as diabetes or cardiovascular disease, and 2) how to improve the quality of nursing home care experienced by racial and ethnic minorities, sexual and gender minorities, and persons with disabilities.



Hospital admissions and readmissions for chronic illnesses generate significant expenditures for Medicare.<sup>8</sup> It is not clear if racial and ethnic minorities, sexual and gender minorities, and persons with disabilities are disproportionately represented in readmissions, but there is clear data showing that these groups are disproportionately affected by mental illness and comorbid chronic conditions.<sup>9,10,11</sup> Tailored approaches to care coordination can help to reduce disparities among these vulnerable populations.<sup>12</sup> We will address this issue by developing and testing approaches to improve post-hospital discharge care coordination for priority populations (racial and ethnic minorities, sexual and gender minorities, and persons with disabilities) who also have a mental illness and other chronic conditions.

#### Example Activity: Guide to Preventing Readmissions Among Racially and Ethnically Diverse Medicare Beneficiaries

This guide identifies key themes that emerge when devising a system to prevent hospital readmissions. It provides an overview of key issues related to readmissions for racially and ethnically diverse Medicare beneficiaries and a set of activities that can help hospital leaders take action to address readmissions in this population.

Another topic of concern to CMS is increasing the provision of culturally and linguistically appropriate care in nursing homes. Nursing homes serve vulnerable and culturally and linguistically diverse populations including racial and ethnic minorities, sexual and gender minorities, and persons with disabilities. Training in cultural competency, related to race, ethnicity, language, disability, sexual orientation, and gender identity is critical for all members of the care team. Research has shown that sexual and gender minority elders experience discriminatory and culturally insensitive treatment in nursing homes and long-term care, causing stress for these individuals and their families.<sup>13,14</sup> Within this priority, we would work to increase the provision of culturally competent care in nursing homes by testing and implementing the *National Standards for Culturally and Linguistically Appropriate Services in Health and Health Care* (National CLAS Standards) in nursing homes.<sup>15</sup>

## PRIORITY 4: INCREASE THE ABILITY OF THE HEALTH CARE WORKFORCE TO MEET THE NEEDS OF VULNERABLE POPULATIONS

Priority 4 focuses on increasing **understanding** of health care workforce innovations in reducing disparities, developing **solutions** to equip the health care workforce to provide culturally and linguistically and effective care, and disseminating best practices to drive stakeholders to **actions** that drive improvements in health care workforce quality and impact.



The adequacy of the health care workforce is critical to the quality of care and health outcomes of Medicare beneficiaries. The ACA includes provisions to improve access and delivery of care

to underserved populations by providing opportunities for targeted workforce development and expansion. Among these opportunities are the incorporation of expanding roles of mid-level providers and the option to increase the role of community health workers in health care systems. In the regional listening sessions, stakeholders highlighted opportunities and challenges they experience as they try to expand and adapt their

health care workforce to better engage individuals and families in patient-centered, competent care. Diversifying the workforce by expanding the roles for community health workers, a top priority for CMS stakeholders, would support the HHS Disparities Action Plan and the National CLAS Standards. These standards also provide guidance on how providers can reduce disparities by improving their cultural competence, addressing health literacy, and providing communication and language assistance.

### Example Activity: Evidence Base for CHWs

This activity will establish a learning collaborative to support organizations with CHW programs and standardized trainings, in order to evaluate whether the use of CHWs and mid-level staff help reduce disparities.

Experts acknowledge the challenge of patient and family engagement in a new value-focused health paradigm. This challenge is particularly acute for hospitals as they work to account for social needs and link patients to wrap-around services. Redesigned health delivery needs to engage patients and families not only through physician interactions, but also with nurses, pharmacists, health educators, community health workers, and dieticians who are equipped to reach patients where they are and communicate effectively with them. Expanding care teams to include new roles, and providing skills and competency training can help providers to improve the health of diverse patient populations and communities.<sup>16</sup>



## PRIORITY 5: IMPROVE COMMUNICATION AND LANGUAGE ACCESS FOR INDIVIDUALS WITH LIMITED ENGLISH PROFICIENCY AND PERSONS WITH DISABILITIES

Priority 5 focuses on **understanding** and raising **awareness** of barriers to the provision of communication and language access services, and disseminating **solutions** to enable **action** from providers to overcome those barriers.



Effective health care communication is defined as “the successful joint establishment of meaning wherein patients and health care providers exchange information, enabling patients to participate actively in their care from admission through discharge, and ensuring that the responsibilities of both patients and providers are understood.”<sup>17</sup> Communication should take into account an individual’s social background, including preferred language, health literacy level, culture, and disability status. Effective communication results in informed shared decision making between providers, patients and their families, and higher quality of care and better health outcomes.<sup>18</sup>

This priority will address disparities related to persons with limited English proficiency and individuals with disabilities. Persons with limited English proficiency often struggle to communicate effectively in English because their primary language is not English.<sup>19</sup> Eight percent of Medicare beneficiaries are persons with limited

### Example Activity: Language Access

This activity will identify and disseminate best practices and promising approaches to help providers and health plans improve language access for beneficiaries.

English proficiency.<sup>20</sup> According to the 2010 U.S. Census, there are approximately 56.7 million people—18.7 percent of the population—in the U.S. with a disability. Disabilities that affect communication can include hearing, visual, and cognitive impairments. In 2011, 12 percent of Medicare beneficiaries and 41 percent of dual-eligible beneficiaries had a disability.<sup>21</sup> Communication and language barriers are associated with decreased quality of care and clinical outcomes, longer hospital stays, and higher rates of readmission.

Evidence suggests that ensuring communication and language access services for patients is important to delivering high quality care for all populations.<sup>22</sup> To improve equity in Medicare quality, we will identify language access needs among beneficiaries with limited English proficiency and persons with disabilities across different care settings, and disseminate best practices that CMS and stakeholders can employ to improve communication and increase language access for the increasingly diverse Medicare population. These activities support the goal of HHS Language Access Plan.

## PRIORITY 6: INCREASE PHYSICAL ACCESSIBILITY OF HEALTH CARE FACILITIES

Priority 6 focuses on **understanding** the current landscape of physical accessibility to health care facilities for Medicare beneficiaries, identifying **solutions** to increase physical accessibility of health care facilities, and encouraging **action** to make health care facilities more accessible to beneficiaries with physical disabilities.



Individuals with disabilities experience significant disparities in health status: they are less likely to obtain preventive services such as mammography or Pap testing and they are more likely to delay getting needed medical care.<sup>23</sup> The challenges that populations with disabilities face are exacerbated by a variety of social, economic, and environmental conditions. In many cases, this comes down to a lack of available or known settings where people with physical access challenges can get care.

Physical inaccessibility of hospitals and provider offices reduces access to care for people with disabilities.<sup>24</sup> Despite the passage of the Americans with Disabilities Act of 1990 (ADA), national data are not available on the accessibility of health care facilities and services, and many provider offices and services are inaccessible to people with disabilities.<sup>25</sup> A recent study of sub-specialty practices in four cities in the U.S. found that 22 percent of practices reported being unable to accommodate a patient in a wheelchair due to accessibility limitations.<sup>26</sup>

### Example Activity: Physical Disability Accessibility

This activity involves conducting research and analysis to better understand the current landscape around physical accessibility and explore research questions related to improving physical accessibility in various health care settings, such as physician's offices, hospitals, and clinics.

Researchers and stakeholders have identified a need to better enforce provider accessibility requirements and compliance with the ADA, and to collect data from providers on accessibility issues. We will conduct research on the current landscape of physical accessibility to understand gaps in knowledge and identify effective strategies CMS and stakeholders can implement to address those gaps. As we learn about the challenges and identify solutions, we will engage stakeholders to improve care for individuals with disabilities and advance equity in Medicare quality.

## Conclusion

CMS sees tremendous value in promoting health equity in Medicare. By improving our **understanding and awareness** of disparities, their causes and why they matter; creating and disseminating promising **solutions**; and implementing sustainable **actions**, we will reach our destination of reduced disparities and healthier Medicare beneficiaries. The deliberate and thoughtful process we undertook to develop this plan yielded a set of six priorities which capitalize on CMS' critical role in advancing health equity and leverage the agency's existing work, while also identifying new and high-value opportunities to expand our impact. The priorities are designed to evolve with the changing health care environment, and the activities developed for each priority will reflect ongoing monitoring of emerging issues in health equity and Medicare. This plan embraces CMS' mission to continuously drive quality improvement and health care excellence. Implementing the *CMS Equity Plan for Medicare*—with the support of CMS centers and offices, QIN-QIOs, HENs, and other stakeholders—will foster higher quality and more equitable health care for all Medicare beneficiaries.

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# **CMS Quality Strategy 2016**

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## Overview

The Centers for Medicare & Medicaid Services (CMS), in collaboration with public and private partners, is transforming how we conduct business and operations, connect providers, and empower consumers and beneficiaries. We are working to build a health care delivery system that's better, smarter and healthier—a system that delivers improved care, spends health care dollars more wisely, and one that makes our communities healthier. CMS is striving to support the delivery of consistent high-quality care, promote efficient outcomes in our health care system, and ensure that health insurance remains affordable for the millions of Americans seeking and receiving coverage. We are using all our policy levers and program authorities (see below) to achieve these goals while rewarding innovation in the delivery of services, implementing initiatives to reduce provider burden, and employing state-of-the-art technologies to assure program integrity.

Driving quality improvement is a core function of CMS. This commitment is evident as CMS enhances its partnerships in a delivery system where providers are supported in achieving better outcomes in health and health care at lower cost for the beneficiaries and communities they serve. CMS must strategically implement these efforts to ensure that providers meet their goals, quality of life improves for beneficiaries and consumers, and patients receiving care are healthy and safe.

The CMS Quality Strategy guides the activities of all agency components working together toward transformation. It builds on the foundation of the CMS Strategy and the HHS National Quality Strategy for Improvement in Health Care (NQS). The National Quality Strategy was developed through a participatory, transparent, and collaborative process with input from a wide array of stakeholders, led by the Agency for Healthcare Research and Quality, and is updated annually in a report to Congress.

## Introduction

Federal, state, and local governments, businesses, providers, and advocates are working together to build a better health care system. Quality care can increasingly be affordable care and in working together, everyone can benefit. From finding common ground on best practices to collaborating for better outcomes across sectors and across the nation, health care stakeholders are ready to get this work done. CMS's vision is to seize this moment to transform the health care system into one that works every time, for every American. This transformed system aims to deliver better care, spend our health care dollars in a smarter way, and put consumers at the center of care to keep them engaged and healthy.

Consumers are demanding better ways to manage their own health, and seek transparency in how they find health care plans and what health care costs their plans will cover. Many activities will contribute to transformation of the current system, including changing the way CMS pays providers to incentivize quality instead of quantity. Smarter payments will help cut down on inefficiencies and the overuse of costly tests and other diagnostics. Better organization and use of data and health information, including the use of electronic health records (EHR) and other health information technology (health IT) resources, will help providers and consumers communicate more easily and make informed decisions. Giving consumers access to their records enables them to be more active participants in their care, making care more person-centered.

The Affordable Care Act (ACA) continues to increase access to high-quality, affordable health care for all Americans, including better access to coverage for persons with pre-existing conditions and young adults, as well as expanded access to preventive services. The National Quality Strategy articulates broad aims and priorities that have guided the development of HHS and CMS programs, regulations, and strategic plans for new initiatives, and serves as a critical tool for evaluating the full range of federal health care efforts. It has been the impetus for planning across HHS to establish mechanisms to obtain additional private sector input on specific goals, benchmarks, and quality metrics. Successful implementation of the National Quality Strategy and the CMS Quality Strategy envisions health and care that is person-centered, provides incentives for the right outcomes, is sustainable, emphasizes coordinated care and shared decision-making, and relies on transparency of quality and cost information.

It promotes alternative payment models, including Accountable Care Organizations (ACOs) and episode-based payments, value-based purchasing, integrated care, and medical and health homes. In January 2015, The Administration set goals for value-based payments within the Medicare Fee-for-Service (FFS) system and invited private sector payers to match or exceed them:

- **Goal 1:** 30% of Medicare payments are tied to quality or value through alternative payment models by the end of 2016, and 50% by the end of 2018.
- **Goal 2:** 85% of all Medicare FFS payments are tied to quality or value by the end of 2016, and 90% by the end of 2018.

The CMS Quality Strategy pursues and aligns with the broad aims of the National Quality Strategy as well as the Administration's strategy for shifting Medicare payments from volume to value:



- **Better Care:** Improve the overall quality of care by making health care more person-centered, reliable, accessible, and safe.
- **Smarter Spending:** Reduce the cost of quality health care for individuals, families, employers, government, and communities.
- **Healthier People, Healthier Communities:** Improve the health of Americans by supporting proven interventions to address behavioral, social, and environmental determinants of health, and deliver higher-quality care.

To advance its three aims, the National Quality Strategy identified six priorities:

1. Making care safer by reducing harm caused in the delivery of care;
2. Ensuring that each person and family is engaged as partners in their care;
3. Promoting effective communication and coordination of care;
4. Promoting the most effective prevention and treatment practices for the leading causes of mortality, starting with cardiovascular disease;
5. Working with communities to promote wide use of best practices to enable healthy living; and
6. Making quality care more affordable for individuals, families, employers, governments, and communities by developing and spreading new health care delivery models.

These priorities map to the three National Quality Strategy aims and are goals in the CMS Quality Strategy. This document identifies quality-focused objectives that CMS can drive or enable to further these goals. Quality interventions are inherently interrelated, and many goals include concepts that could be articulated under more than one goal. We organized and structured objectives based on where the primary driver of change occurs.

## Organizational Tenets

### Vision

The vision of the CMS Quality Strategy is to optimize health outcomes by improving quality and transforming the health care system.

### Mission

CMS serves the public as a trusted partner with steadfast focus on improving outcomes, beneficiary/consumer experience of care, population health, and reducing health care costs through improvement. To maintain this focus, we will:

- Lead quality measurement alignment, prioritization, and implementation and the development of new, innovative measures;
- Guide quality improvement across the nation and foster learning networks that generate results;
- Reward value over volume of care;

- Develop, test, and implement innovative delivery system and payment models to improve care and lower costs;
- Collaborate across CMS, HHS, and with external stakeholders;
- Listen to the voices of beneficiaries, patients and their families, consumers, and those who provide health care in all settings;
- Foster an environment that creates the capacity for state Medicaid/CHIP agencies and health plans to improve quality through use of locally generated data and local innovations in care delivery;
- Be a model of effective business operations, customer support, and innovative information systems that excel in making meaningful information available; and
- Develop CMS staff, create high-functioning teams, foster pride and joy in work at all levels, continuously learn, and strive to improve.

## Values

The CMS Quality Strategy aligns with the CMS Organizational Strategy's values, and we commit our work to:

- **Beneficiaries and Consumers Come First** – We put first the best interest of the people we serve.
- **Public Service** – We take pride in our unique and privileged role in the health care of the nation.
- **Integrity** – We hold ourselves to the highest standards of honesty and ethical behavior.
- **Accountability** – We earn trust by being responsible for the outcomes of our actions.
- **Teamwork** – We foster unconditional teamwork and regard every employee in CMS as available and willing to help others.
- **External Collaboration** – We strive to work in full cooperation with the private sector.
- **Innovation** – We encourage finding and testing new ideas in all that CMS does.
- **Excellence** – We are committed to strengthening our organizational culture of striving for excellence in our products, services, and how we do business.
- **Respect** – We treat all our stakeholders and one another with the utmost respect and professionalism.

We strive to continually refine our processes, systems, and services for the benefit of internal and external stakeholders. Throughout our work to improve quality, we will: seek input and actively listen, collaborate, and partner with stakeholders outside CMS; be responsive to beneficiary and provider needs; learn from others and foster learning networks; be a catalyst for health system improvement; and focus on what is best for health care consumers, as well as their individual goals.

## The CMS Quality Strategy Goals

This Quality Strategy delineates objectives and outcomes to guide action to realize six broad and interrelated goals. The CMS Quality Strategy goals reflect the six priorities set out in the National Quality Strategy:

- **Goal 1:** Make care safer by reducing harm caused in the delivery of care.
- **Goal 2:** Strengthen person and family engagement as partners in their care.
- **Goal 3:** Promote effective communication and coordination of care.
- **Goal 4:** Promote effective prevention and treatment of chronic disease.
- **Goal 5:** Work with communities to promote best practices of healthy living.
- **Goal 6:** Make care affordable.

## Foundational Principles

Four foundational principles guide CMS's action toward each of these goals. To ensure we actively address these principles, we will continuously evaluate how we embed the foundational principles within each goal.

### 1. Eliminate Racial and Ethnic Disparities

Health care disparities are the differences in health and health care between population groups. Despite progress in total population health, the gaps among racial and ethnic groups in the quality, experience, outcomes, costs of health care, and the social determinants of health must close at a faster pace. Communities of color experience poorer health outcomes, are less likely to have a usual source of care or receive routine preventive services, and have higher rates of morbidity and preventable conditions than non-minorities. Disparities in health care exist even when controlling for gender, condition, age, disability, socioeconomic status, and other factors.

Eliminating disparities is essential for improving the health care delivery system for all Americans. CMS is dedicated to helping eliminate disparities in health care by aligning to the HHS Action Plan to Reduce Racial and Ethnic Disparities. CMS is also committed to achieving health equity by improving data collection to better measure and analyze disparities across programs and policies. As part of these efforts, CMS is promoting culturally and linguistically appropriate care for all beneficiaries, as well as health literacy to help people navigate the health care system effectively.

There is a need for all providers to work actively to continuously monitor and address disparities, and to be accountable for reducing gaps in care and outcomes. All CMS beneficiaries must have access to and receive person-centered, equitable, effective, safe, timely, and efficient care and services.

### 2. Strengthen Infrastructure and Data Systems

Data and information are essential aspects of a healthy, robust health care infrastructure. Services, treatment, and care rely on various components of the health care system delivered at different levels. Health care is moving into the digital and "big data" world. With passage of the Health Information Technology for Economic and Clinical Health Act, the nation's hospitals, clinics, and providers began transitioning to health IT in greater numbers. Providers are increasingly electronically accessing patient

records and histories tracking care, and making electronic records available to patients. This increase in data sharing and usage allows for greater innovation, helping us to better understand our country's health challenges and see the incredible potential for growth and change.

Strengthening infrastructure and data systems for public reporting and using electronic data collection are essential to all CMS activities. These efforts enhance the agency's ability to: monitor trends in critical health measures among priority populations; monitor health status, health care, and health policies at the national, state, local, and tribal levels; and conduct in-depth studies of population health at the community level, and for specific groups of individuals. A robust data infrastructure is also necessary to ensure transparency of accurate quality and cost information. Increasingly, consumers and families rely on this information to make informed decisions when choosing a health care provider and/or health plan and to understand the types of available health care services. Payment programs and models recently implemented by CMS (e.g., the Medicare Shared Savings Program, the Medicare Fee-for-Service Physician Feedback Program/Physician Value-Based Payment Modifier, and Medicaid shared savings models) require new capacities in CMS information systems, including the ability to align programs and administer population- and value-based payments. The Medicare Access and CHIP Reauthorization Act (MACRA) of 2015, which will transform the way in which CMS pays clinicians, explicitly emphasizes expanded use of health IT and frequent data feedback to help clinicians deliver higher quality care. CMS is evolving its infrastructure and data systems to enhance transparency of quality and cost information and to allow for payment and management of accountable, value-based care. As examples, over the past two years, CMS has released unprecedented amounts of data providing insight into utilization trends and patterns among hospitals and physicians. CMS has also begun to transition to star ratings on all of its public reporting provider "Compare" websites to make quality of care more understandable to consumers and the public.

### **3. Enable Local Innovations**

CMS promotes innovation at all levels of the health care system. The effectiveness of health care service delivery often depends on the availability and quality of social services and programs in a given community. Because each local community is unique, CMS will advance programs that allow communities to address their challenges in ways that best meet their needs. Improving access to essential services requires three forms of innovation: (1) *technological*, to ensure availability of services that are more cost effective than existing interventions; (2) *social*, to ensure the equitable distribution of essential services; and (3) *adaptive*, to involve both providers and communities to tailor the adoption of services to local settings.

### **4. Foster Learning Organizations**

A learning organization is one that continually expands its ability to shape its future. For a modern, knowledge-based, service-focused agency like CMS to succeed, learning must be linked to the organization's strategic goals. CMS makes continual learning a routine activity to improve the performance of our entire organization as a total system.

CMS also recognizes the need to support learning across the health care system. As we introduce new programs requiring core competencies in health care improvement and population health, we are mindful of our role in providing educational support for providers, payers, and states. Education does not end when a provider receives credentials or a patient is discharged from an institutional setting to the community. Education is increasingly continuous, deliberate, and an integral part of organizational

learning. CMS is committed to promoting learning and education as key parts of its quality programs and delivery system reform initiatives. For example, CMS launched the Health Care Payment Learning and Action Network (LAN) in 2015. The goals of the LAN are to convene stakeholders to collaborate on generating and documenting evidence for best practices for moving to alternative payment models.

By fostering learning organizations, CMS will use funding more effectively and continue to explore the best methods for delivering health care and disseminating best practices.

## Drivers and Policy Levers

CMS is working to achieve these objectives through multiple drivers and policy levers of quality, including, but not limited to:

- Measuring and publicly reporting providers' quality performance and cost of services provided;
- Providing technical assistance and fostering learning networks for quality improvement;
- Adopting evidence-based National Coverage Determinations;
- Creating incentives for quality and value
- Setting standards for providers that support quality improvement; and
- Creating survey and certification processes that evaluate capacity for quality assurance and quality improvement.

## Agents and Partners

Many “agents” are necessary to shape initiatives and implement activities to further the goals and objectives in this Strategy, including CMS, state Medicaid /CHIP agencies; other federal, state, tribal, and local governmental organizations; and health providers. CMS is both a driver and enabler of activities while other federal agencies, state Medicaid agencies, health care organizations, providers, advocacy groups, and academia play critical roles in improving the quality of health care for all Americans.

### CMS

CMS plays two roles in implementing this Quality Strategy: driver and enabler. In some instances, CMS has the capacity to directly drive or implement changes to payments, regulations, and improve transparency in service of the quality improvement objectives outlined in this Strategy. In other cases, CMS can enable external agents such as health systems, hospitals, practitioners, and community providers to implement initiatives and activities by supporting demonstration projects, developing educational materials and guidance, and facilitating the exchange of promising practices through learning and action networks. This Strategy presents CMS-driven and CMS-enabled initiatives together.

### Partners

To achieve its goals, CMS forges partnerships among federal, state, territorial, tribal, and local governments; business, industry, and other private sector partners; professional philanthropic organizations; community and faith-based organizations; and citizens

CMS also works closely with state Medicaid/CHIP agencies that partner in financing and implementing health care programs. Private sector insurers are key partners that often model their approaches to payment and delivery on CMS approaches. We continue relationships with these public and private



sector payers to leverage the impact of new payment models and quality improvement best practices across settings of care.

CMS components also coordinate efforts with other federal entities through quality initiatives and issue-based workgroups. These partners and workgroups include the Quality Improvement Council (QIC), the Agency for Healthcare Research and Quality (AHRQ), the National Institutes of Health (NIH) the Veterans Health Administration (VHA), Centers for Disease Control and Prevention (CDC), the Office of the Assistant Secretary for Planning and Evaluation (ASPE), the Substance Abuse and Mental Health Services Administration (SAMHSA), the Medicare Payment Advisory Commission (MedPAC), the CMS Office of Legislation (OL), the Office of the National Coordinator for Health Information Technology (ONC), and the Administration for Community Living (ACL). CMS components also work closely with non-governmental organizations to strive for better care throughout the health care system, such as The Joint Commission, National Quality Forum (NQF), National Committee for Quality Assurance (NCQA), American Medical Association (AMA), and American Hospital Association (AHA). In 2015, CMS established a number of “affinity groups” within the agency to focus groups of individuals interested in and working on particular topics (e.g., Alzheimer’s Disease and Related Dementias (ADRD), Care Coordination, Person and Family-Centered Care) to better align and focus our work.

## Goal 1: Make care safer by reducing harm caused in the delivery of care

### Strategic Result: Health care-related harms are reduced.

Health care-related errors harm millions of Americans each year and add billions of dollars to health care costs. Two prominent examples involve infections and medications: The CDC estimates that at least 1.7 million health care-associated infections occur each year, leading to 99,000 deaths, while adverse medication events cause more than 770,000 injuries and deaths each year. The cost of treating patients harmed by these events is estimated at \$5 billion annually.<sup>1</sup>

CMS strives to make care safer by supporting a culture of safety, eliminating inappropriate and unnecessary care that can lead to harm, and reducing rates of health care-acquired conditions (HACs) in all health care settings (see National Action Plan to Prevent Healthcare-Associated Infections: Road Map to Elimination). We can achieve these objectives through improved communication among patients, families, and providers; empowering patients to become more engaged in their care; better coordination of care within and across settings; and broad implementation of evidence-based safety best practices wherever care is provided. Payment systems that incentivize smarter use of tests and treatments will minimize the harm that can result from inappropriate care.

Through programs and initiatives such as section 1115 Medicaid demonstration waivers, Value-Based Purchasing (including Hospital VBP), Medical and Health Homes, Medicare Advantage Quality Bonus Payments, and the End-Stage Renal Disease Quality Incentive Program, CMS provides financial incentives that reward providers for adopting best practices that can decrease harm. CMS also provides opportunities for providers to work together through Quality Improvement Organizations (QIOs), Partnership for Patients, and the Transforming Clinical Practice Initiative (TCPI). These initiatives help to diffuse and promote the systematic use of best practices that emphasize quality improvement and patient safety, thus accelerating the rate of adoption of new knowledge in the delivery system. CMS also assures patients' safety through its survey and certification authority by assessing compliance with federal health and safety-related standards, including those related to quality assessment and performance improvement.

These strategies to achieve a safer health care system are working. These strategies to achieve a safer health care system are working. The final 2013 Annual Report of Hospital Acquired Condition Rate and Estimates, report released by the Department of Health and Human Services<sup>2</sup> shows an additional 9 percent decline in the rate of hospital-acquired conditions (HACs) from 2012 to 2013 over the interim rate of 17 percent, and a 17 percent decline, from 145 to 121 HACs per 1,000 discharges, from 2010 to 2013. A cumulative total of 1.3 million fewer HACs were experienced by hospital patients over the 3 years (2011, 2012, 2013) relative to the number of HACs that would have occurred if rates had remained steady at the 2010 level. We estimate that approximately 50,000 fewer patients died in the hospital as a result of the reduction in HACs, and approximately \$12 billion in health care costs were saved from 2010

<sup>1</sup> Agency for HealthCare Research and Quality, *AHRQ's Efforts to Prevent and Reduce Health Care-Associated Infections Fact Sheet*: <http://www.ahrq.gov/research/findings/factsheets/errors-safety/haiflyer/index.html>

<sup>2</sup> Agency for HealthCare Research and Quality, *2013 Annual Report of Hospital Acquired Condition Rate and Estimates*, <http://www.ahrq.gov/professionals/quality-patient-safety/pfp/hacrate2013.html>

to 2013. Although the precise causes of the decline in patient harm are not fully understood, the increase in safety has occurred during a period of concerted attention by hospitals throughout the country to reduce adverse events, spurred in part by Medicare payment incentives and catalyzed by the U.S. Department of Health and Human Services Partnership for Patients initiative led by CMS.

CMS aims to partner with health care providers in a continual effort to reduce the risk for injury from care, aiming for zero harm whenever possible and striving to create a system that reliably provides high-quality health care for everyone. We believe this kind of system can make a substantial difference in improving care by preventing serious adverse medication events and eliminating health care-associated infections and other preventable conditions.

## **Goal 1 – Foundational Principles**

### **Eliminate disparities**

- Implement stratified reporting of quality measures by race, ethnicity, disability, and primary language.
- Educate health care professionals about health disparities and cultural and linguistic competencies as part of a curriculum to promote a culture of safety.
- Improve safety and reduce unnecessary and inappropriate care by teaching health care professionals how to better communicate with people of low health literacy and more effectively link health care decisions to person-centered goals.
- Promote the use of health care navigators and translation services in the cultivation of a culture of safety.
- Implement integrated care across various health care delivery settings, including the development of effective linkages to community resources.

### **Strengthen infrastructure and data systems**

- Ensure that standardized race, ethnicity, gender, primary language, geographical (rural/urban), and disability information is collected to identify disparities in health care delivery outcomes.
- Use health IT (EHR, registries, and health information exchanges) to identify people at risk and improve safety across settings of care.
- Implement and test value-based and alternative payment models that link payment incentives to measures of safety and appropriateness.
- Link quality measurement to clinical decision support to promote provision of evidence-based care by providers and to reduce inappropriate use of medications, treatments, and diagnostics.
- Emphasize use of outcome-based measures of safety over process measures to encourage providers to innovate quality improvement practices to reduce or eliminate harm.

### **Enable local innovations**

- Support the collection of data locally to identify and target issues of harm and inappropriately delivered care within a community or practice location.
- Support multi-stakeholder meetings that include local frontline providers, individuals, and families to identify innovative solutions to reduce harm in all settings.

### **Foster learning organizations**

- Support health worker education about reducing inappropriate and unnecessary care, starting with treatments and tests highlighted in the Choosing Wisely® campaign, which promotes dialogue between practitioners and patients.
- Encourage multidisciplinary, cross-sector learning communities that bring together clinicians, other licensed providers, persons and families, community health workers, and other community stakeholders to disseminate best practices and learn from high performers.

**Goal 1: Make care safer by reducing harm caused in the delivery of care**

Objectives	Desired Outcomes
Improve support for a culture of safety	<ul style="list-style-type: none"> <li>• Improved application of safety practices involve all team members, patients, and families and assure that individuals' voices are heard</li> <li>• Organizations exhibit strong leadership that educates and empowers the workforce to recognize harm and increase reporting of errors and potential errors</li> <li>• Consumers have increased access to understandable health information</li> <li>• Expanded use of evidence-based services and primary care</li> <li>• Disparities in care are eliminated</li> </ul>
Reduce inappropriate and unnecessary care	<ul style="list-style-type: none"> <li>• Health care organizations continually assess adverse events in accordance with evidence-based practices</li> <li>• Health care cost reductions are attributable to the reduction of unnecessary, duplicative, and inappropriate care</li> <li>• Disparities in care are eliminated</li> </ul>
Prevent or minimize harm in all settings	<ul style="list-style-type: none"> <li>• HACs, Provider Preventable Conditions (PPCs) and health care-associated infections (HAIs) are reduced</li> <li>• Medication error rates are improved</li> <li>• Falls are decreased</li> <li>• Visibility of harm is improved in all settings</li> <li>• Expanded use of evidence-based services and primary care</li> <li>• Person and family access to understandable health information is increased</li> <li>• Disparities in care are eliminated</li> </ul>



## Goal 2: Strengthen persons and their families as partners in their care

**Strategic Result: Persons and families are engaged as informed, empowered partners in care.**

CMS is at the forefront of the nationwide effort to transform health care delivery to meet the individual's person-centered goals in creating a health care system that fully engages individuals and families in the design, delivery, and evaluation of care. *The CMS Quality Strategy uses "family" broadly to include non-medical participants in a person's health care.* For clinical purposes, the Institute of Medicine defines patient-centered care as "respectful of and responsive to individual patient preferences, needs, and values, and ensuring that patient values guide all clinical decisions." The National Quality Forum defines person- and family-centered care as "an approach to the planning and delivery of care across settings and time that is centered around collaborative partnerships among individuals, their defined family, and providers of care. It supports health and well-being by being consistent with, respectful of, and responsive to an individual's priorities, goals, needs, and values."

In addition to improving the individual's experience, studies have found that person-centered care models improve quality of care and health outcomes, engage people more actively in their health care, and can reduce costs and disparities in care.

A person-centered approach considers the individual as multifaceted, not merely as a "receiver" of services. For example, the Affordable Care Act requires that states receiving federal funds develop systems that are responsive to the needs and choices of beneficiaries receiving home and community-based services (HCBS), maximize independence and self-determination, and provide coordination to assist with achieving a community-supported life. This approach demands that providers and individuals share power and responsibility in goal setting, decision-making, and care management. It also requires giving people access to understandable information and decision support tools to equip them and their families with the information to manage their health and wellness, navigate the full span of the health care delivery system, and make their own informed choices about care.

As examples, CMS has embarked on QIO initiatives, such as the Everyone with Diabetes Counts program, which gives each person with diabetes and their family an active role in care. CMS has also developed and tested various experience of care surveys, including those for people more difficult to query, such as persons using HCBS.

CMS aims to strengthen person and family engagement in health care by:

- Actively encouraging person and family engagement across the care continuum;
- Promoting tools and strategies that promote self-determination and achieve individuals' goals, values, and preferences, including self-managing and self-directing care;
- Creating an environment where the individual, as the center of the health care team, can create person-centered, strengths-based health and wellness goals that are accessible, appropriate, effective, sufficient, and aligned with the individual's values and preferences;
- Improving the experience of care for individuals and families by developing criteria for identifying person and family engagement best practices and techniques ready for widespread integration and scaling; and

- Working with partners to promote and support education and training of healthcare professionals to partner effectively with patients and families.

## **Goal 2 – Foundational Principles**

### **Eliminate disparities**

- Ensure the use of culturally, linguistically, and ability-appropriate consumer and family educational materials.
- Tailor self-management education and support programs to minorities and other vulnerable and underserved populations.

### **Enhance infrastructure and data systems across all settings of care**

- Use health information technology (IT) to ensure communication and collaboration among providers, individuals, and families at the option of the person.
- Promote and support providers in creating health IT-enabled environments for persons engaged in the health care system.

### **Enable local innovations**

- Encourage providers to develop innovative interventions to improve communication with persons and families.
- Incentivize health plans and providers to deploy effective person-centric tools and resources such as person-centered care plans.

### **Foster learning organizations**

- Improve quality measurement and tools to measure person and family engagement.
- Promote transparency in access to quality health care data.
- Educate clinical providers about self-management best practices and how to teach these best practices to patients.

**Goal 2: Strengthen person and family engagement as partners in care**

Objectives	Desired Outcomes
Ensure all care delivery incorporates person and family preferences	<ul style="list-style-type: none"> <li>• People are partners at all levels of care</li> <li>• Care, treatment, and services reflect the individual's personal values and goals</li> <li>• Coordination and communication occurs within and across care teams with the person at the center</li> <li>• Personal preferences are central in decision processes and implementation</li> <li>• There is team-based development of goals in plans of care</li> <li>• Information is updated and accessible for use by patients and families</li> <li>• Achievement of person-centered goals for health and wellness</li> <li>• Improved coordination and communication within and across organizations</li> <li>• Disparities in care are eliminated</li> </ul>
Improve experience of care for persons and families	<ul style="list-style-type: none"> <li>• Improved support for integrated care models</li> <li>• Expanded use of evidence-based services in all settings, including primary care</li> <li>• Increased access to understandable health information</li> <li>• Improved promotion of community-clinical partnerships and services aimed at managing and improving care at the local level</li> <li>• Expanded use of person experience of care survey results to identify best care and treatment practices</li> </ul>
Promote self-management	<ul style="list-style-type: none"> <li>• Improved application of self-management practices in CMS's programs</li> <li>• Improved visibility of self-management</li> <li>• Improved support for integrated care models</li> <li>• Increased access to understandable health information</li> <li>• Updated and available information for use by consumers and families</li> <li>• Improved patient confidence in managing multiple chronic conditions</li> <li>• A respectful, trustworthy, and transparent health care culture that establishes and sustains relationships</li> </ul>

## Goal 3: Promote effective communication and coordination of care

### Strategic Result: Communication, care coordination, and satisfaction with care are improved.

Poor coordination of health care can result in medication errors; unnecessary procedures, treatment, and services; avoidable hospital admissions and readmissions; and other harms to health care patients. Most health care payment systems do not foster coordination of care or understanding of patient preferences, but instead pay for volume over value. Rewarding providers for performing more services, rather than for working together to support individuals' health goals and preferences, compromises their ability to achieve the best outcomes for individuals and communities.

Jencks et al. found that nearly 1 in 5 Medicare beneficiaries discharged from the hospital is readmitted within 30 days.<sup>3</sup> Medication errors and poor communication between providers in the inpatient setting and other post-acute care (PAC) settings (e.g., nursing homes, assisted living, and health homes) are some key drivers for readmissions within 30 days. Readmissions are also a major source of patient and family stress and may contribute substantially to loss of functional ability—a key quality indicator—particularly in older adults. Some readmissions are unavoidable and result from inevitable progression of disease or worsening of chronic conditions. Current readmission rates hover at 18.8 percent for Medicare and 14.4 percent for all payers. CMS estimates that readmissions within 30 days cost the Medicare program more than \$17 billion annually<sup>4</sup>.

Effective care coordination models deliver better health care quality at lower costs across all settings, from small physician practices to large hospital centers to community providers. Gaps and duplication in service delivery can be reduced or eliminated through the use of technologies, such as EHR and other health IT, electronic long-term services and support plans, e-prescribing, and telemedicine.

CMS encourages care coordination across the health care continuum so all health care patients receive seamless and more effective care. Hospitals, long-term care and rehabilitation facilities, and long-term care providers, including institutional and HCBS providers, are helping recently discharged patients avoid unnecessary re-hospitalization. CMS promotes a person-centered approach and recognizes the positive impact of having critical pieces of information communicated across all providers and settings of care.

Examples of CMS initiatives that further this goal include:

- Strengthening the hospital Conditions of Participation (CoP) for Discharge Planning to require more robust communication between acute and post-acute care settings;
- HHS's Partnership for Patients initiative, led by CMS;
- Advancing primary care services, medical homes, and health homes;
- Promoting the development of ACOs;
- Medicare and Medicaid Electronic Health Record Incentives Program (Meaningful Use);

<sup>3</sup> Jencks SF, Williams MV, Coleman EA. Rehospitalizations among patients in the Medicare fee-for-service program. *N Engl J Med*. Apr 2 2009;360(14):1418-1428

<sup>4</sup> Centers for Medicare and Medicaid, Policy & Data Analytics Group, Office of Information Products and Data Analytics

- The 11<sup>th</sup> Scope of Work for CMS's Quality Innovation Network/Quality Improvement Organizations;
- Bundled payment initiatives;
- Financial alignment initiative to integrate care for Medicare-Medicaid enrollees;
- Per the Improving Medicare Post-Acute Care Transformation Act of 2014 (IMPACT), to standardize patient assessment data to enable interoperability and facilitate care coordination, discharge planning, and improvements in quality and outcomes;
- Implementation of the Merit-based Incentive Payment System (MIPS), which emphasizes, among other focus areas, care coordination measures and clinical practice improvement activities;
- The State Innovation Models Initiative (SIM);
- Test Experience and Functional Tools (TEFT) grant program to field test an experience survey for HCBS and a set of functional assessment items, demonstrate personal health records, and develop a standard, electronic, long-term services and supports plan with the Office of the National Coordinator for Health Information Technology;
- Medicaid's Health Home State Plan benefit;
- Medicaid Innovation Accelerator Program support to states that are focused on improving care for beneficiaries with complex needs and high costs;
- Initiative to Reduce Avoidable Hospitalizations Among Nursing Facility Residents; and
- Medicare Advantage Organizations' (MAOs) Quality Improvement Projects (QIPs) focus on reducing all-cause hospital readmissions for MA enrollees.

When all health care providers coordinate efforts in a person-centered manner, it helps ensure that the individual is able to choose the services needed and control how and where they are delivered. Improved care coordination and communication across health care providers is essential to realizing better care, smarter spending, and healthier people. Individuals receiving care and their families also enjoy improved understanding of and satisfaction with care.

## **Goal 3 – Foundational Principles**

### **Eliminate disparities**

- Ensure that health information is culturally and linguistically appropriate and that patient and families understand and follow up appropriately on discharge instructions from an institutional setting.
- Enable effective health care system navigation by empowering persons and families through educational and outreach strategies that are culturally, linguistically, and health literacy-appropriate.
- Support a system that complies with the Americans with Disabilities Act, uses person-centered language, reinforces personal roles and empowerment, reflects independent living philosophies, and promotes recovery-oriented models for behavioral health services.



### **Enhance Infrastructure and data systems**

- Build and apply data systems to facilitate coordination of care across the health care continuum, as well as to facilitate health and wellness of the individual.
- Use health IT to support effective health care system navigation for individuals and families and all other care partners.

### **Enable local innovations**

- Encourage use of community health workers, resource coordinators, support brokers, individuals trained and/or certified in person-centered care planning, and other community-based professionals to support person and family activation, and health care system and community navigation.
- Promote the use of HCBS to maximize satisfaction, improve care transitions across settings, reduce long- and short-term institutionalization, and improve resource use.

### **Foster learning organizations**

- Promote education and training for providers on effective techniques for communicating with individuals, their families and community resources.
- Promote education and training for consumers, their families, and community advocates on person-centered care and techniques for identifying and communicating with providers about their care needs and preferences.
- Encourage analysis of program performance data and use of Plan-Do-Study-Act (PDSA) models in the design and implementation of initiatives to reduce readmissions, improve care transitions, and innovate across community and institutional providers.
- Improve quality measurement of effective care transitions and promote transparency and access to data across settings.

**Goal 3: Promote effective communication and coordination of care**

Objectives	Desired Outcomes
Reduce admissions and readmissions	<ul style="list-style-type: none"> <li>• Reduced admission and readmission rates through self-management, self-determination, and activation efforts</li> <li>• Patients are more satisfied with their ability to access their preferred setting of care</li> <li>• Increased health literacy rate</li> <li>• Survey results demonstrate measurable reduction in deficiencies related to discharge planning and transitions of care</li> <li>• Evidence-based best practices that promote appropriate discharge planning, care transitions, and support for community-based care are embedded in the routine practice of care across the health care continuum</li> <li>• Appropriate interventions prevent development of health conditions that require acute care such as HACS and PPCs</li> <li>• All partners in a particular community work in coordination to optimize care and services</li> </ul>
Embed best practices to enable successful transitions between all settings of care	<ul style="list-style-type: none"> <li>• Integrated, person-centered discharge tools are used across all settings</li> <li>• Patient activation efforts/self-management training are a standard part of clinical care</li> <li>• Improved patient experience with clinician awareness of other clinicians' recommendations</li> <li>• Reduced duplication of testing and other adverse outcomes due to lack of coordination</li> <li>• Community-based support systems and HCBS resources are integrated with clinical health care delivery (e.g., Aging and Disability Resource Centers, Area Agencies on Aging, Centers for Independent Living, and faith-based organizations)</li> <li>• improved patient experience with integration/coordination of care in ambulatory setting</li> <li>• improved patient experience with integration/coordination of care in ambulatory setting</li> </ul>

Objectives	Desired Outcomes
Enable effective health care system navigation	<ul style="list-style-type: none"> <li>• Evidence-based best practices that enable patient activation/self-management are embedded in the routine practice of care (e.g., certified diabetes educators)</li> <li>• Improved patient experience with integration / coordination of care in ambulatory settings</li> <li>• Payer reimbursement is expanded beyond traditional patient education to include self-management education programs for people with multiple chronic conditions</li> <li>• Cross-setting, person-centered discharge planning tools that include person and family goals and preferences are routinely employed</li> </ul>

## Goal 4: Promote effective prevention and treatment of chronic disease

**Strategic Result: Leading causes of mortality are reduced and prevented.**

Chronic conditions last a year or more and require ongoing medical attention and/or limit activities of daily living. They include physical conditions such as arthritis, cancer, and HIV infection, as well as mental and cognitive disorders, such as ongoing depression, substance use disorders, and dementia. More than 133 million Americans report at least one chronic condition, while many have multiple chronic conditions (MCC)—two or more chronic conditions that affect a person at the same time. For example, a person with arthritis and hypertension and a person with heart disease and depression have multiple chronic conditions.<sup>5</sup>

Multiple chronic conditions are important because:

- MCCs are associated with approximately 66 percent of the total health care spending in the United States.
- As many as three out of four Americans aged 65 or older have MCC and approximately two out of three Medicare beneficiaries have MCC.
- Approximately one in four Americans in any age group has MCC, including one in 15 children.
- People with MCCs are also at increased risk for mortality and poorer day-to-day functioning.

When patients' numbers of chronic conditions increase, so do their risks for dying, additional hospitalizations that could be avoided, and possible conflicting treatment plans from physicians and other health care providers. MCC also contribute to frailty and disability. Functional limitations often complicate access to health care, interfere with self-management, and necessitate reliance on family and paid caregivers.

Increased spending on chronic conditions among Medicare beneficiaries is a key factor driving the overall increase in spending in the traditional Medicare program. Individuals with MCC face substantial out-of-pocket costs of their care and higher costs for prescription drugs.

As the health system feels the strain of treating and providing services to persons with chronic conditions, health care providers must do a better job preventing, screening for, and treating the leading causes of mortality and illness in adults and children. These include cardiovascular disease (CVD), cancer, stroke, diabetes, premature births, and behavioral health conditions.

To assist persons with chronic conditions (including those with MCC), CMS strives to make preventive health care services understandable, accessible, and affordable to increase health and well-being, and thus reduce health care costs. We strive to serve patients, beneficiaries, and other stakeholders by:

- Collaborating with providers, states, partner agencies, and stakeholder groups to increase awareness of current and new preventive health care services available to Medicare, Medicaid, and CHIP beneficiaries, and all Americans through the Health Insurance Marketplace;
- Raising the profile of identified preventive services that will have the greatest impact on improving beneficiary health;

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<sup>5</sup> HHS Initiative on Multiple Chronic Conditions <http://www.hhs.gov/ash/initiatives/mcc/>

- Reducing disparities in access to and utilization of primary and specialty health care, preventive services, and reducing disparities in care for at-risk and special needs populations;
- Improving the use of data for monitoring and continuous improvement in population health by aligning population health programs and metrics for tracking prevention and treatment;
- Improving access to coordinated services so that prevention-focused health care and community prevention efforts are available, integrated, and mutually reinforcing;
- Testing and development of Innovation Center models that strengthen links between public health, clinical care, and community supports for health and wellness and aligned incentives;
- Creating access to information about public and private insurance options for persons seeking and receiving health care services; and
- Requiring Medicare Advantage Organizations (MAOs) to focus on promoting effective management of chronic diseases in their enrollee populations

For example, CMS is a lead partner in the Million Hearts® initiative, which seeks to reduce the incidence of heart attacks and strokes by 1 million by 2017. This will be accomplished by increasing awareness of the risk factors for cardiovascular disease and promoting and utilizing proven interventions. Decades of research and practice have demonstrated that public health and clinical preventive strategies can greatly reduce the risk of cardiovascular disease. The key interventions are referred to as the “ABCs”: appropriate aspirin therapy, blood pressure control, cholesterol management, and smoking cessation.

CMS has incorporated prevention measures in our quality reporting programs including the Surviving Sepsis Campaign, Healthy People 2020, as well as screening and treatment for high blood pressure, high cholesterol, smoking cessation, and aspirin use for individuals with ischemic heart disease. Medicaid provisions such as Health Homes, Adult Medicaid Core Set of Quality Measures, and the Program for All-inclusive Care for the Elderly (PACE) (for Medicare and Medicaid enrollees) facilitate achievement of these goals. The Medicare-Medicaid Coordination Office focuses on improving care for the nearly 11 million Americans with complex needs enrolled in both programs; two thirds of this group are low-income older adults, and one third are people under 65 with diabetes.

## **Goal 4 – Foundational Principles**

### **Eliminate disparities**

- Coordinate with existing initiatives and focus new initiatives on improving access to utilization of preventive services in low-income and minority populations (e.g., self-management initiatives).
- Study effectiveness of prevention initiatives in minority communities, and other populations that experience health disparities.
- Promote data analysis strategies that support inclusion of data elements that demonstrate where health disparities exist.
- Promote education of health professionals about disparities in chronic disease incidence and care.



### **Strengthen infrastructure and data systems**

- Use health IT (e.g., EHR and data management systems) to support the integration of clinical preventive services and community-based prevention strategies.
- Implement and test value-based payment models for the prevention, treatment, and management of chronic conditions.

### **Enable local innovations**

- Encourage public health and primary care integration at the local level (e.g., community, hospital, HCBS providers, and schools) to tailor prevention initiatives to the needs and conditions of local populations.
- Identify ways to align state- and federal-level activities to support local integration of prevention efforts (e.g., CMS/CDC, CMS/ACL, etc.).
- Develop and test models that encourage and strengthen links among public health, clinical care, and community supports for health and wellness.

### **Foster learning organizations**

- Support clinician and health worker education about multiple chronic conditions, population health, self-management tools, and strategies for coordination among clinical and community-based preventive services regarding available services and their effectiveness.
- Encourage multidisciplinary, cross-sector learning communities that bring together clinicians, licensed providers, patients and families; care partners; community health workers; urban planners; and other community stakeholders.

#### Goal 4: Promote effective prevention and treatment of chronic disease and conditions

Objectives	Desired Outcomes
Increase appropriate use of screening and prevention services	<ul style="list-style-type: none"> <li>• Consumers understand and use their preventive benefits</li> <li>• Communities that promote health and wellness through prevention are created, sustained, and recognized</li> <li>• Prevention-focused health care and community efforts are available, integrated, and mutually reinforcing</li> <li>• Increased use of screening and preventive services that can reduce disparities</li> <li>• Increased rates of primary, secondary, and tertiary prevention</li> </ul>
Strengthen interventions to prevent heart attacks and strokes	<ul style="list-style-type: none"> <li>• Improved cardiovascular health through evidence-based community interventions</li> <li>• Expanded adoption of healthy lifestyle behaviors across the life span</li> <li>• Increased access to effective medical and other preventive services in clinical and community settings</li> <li>• Decreased rates of heart attacks and strokes</li> <li>• Eliminate disparities in rates of heart attacks and strokes</li> </ul>
Improve quality of care for people with multiple chronic conditions	<ul style="list-style-type: none"> <li>• Individuals are empowered to use self-care management</li> <li>• Providers are equipped with tools and information, to identify comorbidities and interventions that address MCC</li> <li>• Targeted research is focused on individuals with MCCs, and effective interventions are supported</li> <li>• Development of quality measures includes MCC management and care</li> <li>• Disparities in care are eliminated for people with MCC</li> <li>• Morbidity and mortality from MCCs are decreased</li> </ul>

Objectives	Desired Outcomes
Improve behavioral health (BH) access and quality care	<ul style="list-style-type: none"> <li>• More effective use of mental health and substance abuse screens to identify, refer, and treat individuals</li> <li>• Increased sharing of health IT data with BH providers by primary care providers</li> <li>• Increased use of health IT by BH providers to facilitate the sharing of information between BH providers and primary care providers</li> <li>• Individuals initially identified with a BH condition receive services within 30 days of screening / identification</li> <li>• Better availability of evidenced-based practices for individuals with BH conditions</li> <li>• Reduced admission to inpatient facilities and emergency rooms for people with BH conditions (regardless of reason for admission)</li> <li>• Improved access for older adults to depression and alcohol misuse treatment</li> <li>• Better quality of life for people with ADRD and their families</li> </ul>
Improve perinatal outcomes	<ul style="list-style-type: none"> <li>• Reduced elective deliveries prior to 39 weeks (by induction or cesarean section)</li> <li>• Improved appropriateness and timeliness of perinatal care for all pregnant women</li> <li>• Decreased premature births</li> <li>• Improved inter-conception care (care for women who had a previous pregnancy that ended in an adverse outcome, and who may have high-risk conditions and/or behaviors)</li> </ul>

## Goal 5: Work with communities to promote best practices of healthy living

### **Strategic Result: Best practices are promoted, disseminated, and used in communities.**

The social determinants of health are the conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life. These include economic policies and systems, development agendas, social norms, social policies, and political systems.

Many factors influence health and well-being, including individual behavior, access to health services, and the environments where people live and work. For example, some environmental health hazards disproportionately affect low-income communities. Excess mold, allergens, and lead contamination are more often found in low-income housing. Perceptions of safety may impact the amount of time children and adults engage in physical activity outdoors. People with limited access to affordable, healthy foods, due to geography or transportation constraints are less likely to consume the recommended amounts of such foods from recommended food groups.

Efforts to improve lives through access to appropriate health care rely on deploying evidence-based interventions and strong partnerships among local health care providers, public health professionals, community and social service agencies, and individuals. Public health agencies, community planners, social service organizations, and HCBS providers play critical roles in addressing many of these issues at local, state, and tribal levels. Health care providers and systems can improve performance in this area through enhanced communication, increased knowledge, and streamlined payment systems.

CMS is committed to building and strengthening relationships with all partners to better link Medicare, Medicaid, and CHIP beneficiaries, and the providers that serve them, with communities and resources that support good health. In particular, CMS will encourage providers to partner with local and state public health improvement efforts so that Medicaid, Medicare, and CHIP beneficiaries can benefit from the high-quality community-based programs and services that support healthy living, such as exercise classes, self-management programs, health management support groups, lead abatement services, school-based health and fitness programs for youth, food assistance programs, farmers' markets, and tobacco cessation programs.

Some current federal efforts to promote healthy living and healthy communities include:

- Let's Move!
- Safe Routes to School National Partnership;
- CDC: Partnerships to Improve Community Health;
- CDC: Racial and Ethnic Approaches to Community Health;
- WIC Farmers' Market Nutrition Program/U.S. Department of Agriculture Senior Farmers' Market Nutrition Program;
- The Surgeon General's National Prevention Strategy;
- The Surgeon General's Call to Action to Promote Healthy Homes;
- The White House's Neighborhood Revitalization Initiative; and
- The Program for All-inclusive Care for the Elderly.

## **Goal 5 – Foundational Principles**

### **Eliminate disparities**

- Target environmental health initiatives, like lead abatement and asthma self-management programs, in lower-income and minority communities that are disproportionately exposed to hazardous chemicals and allergens.
- Evaluate effectiveness of initiatives aimed at addressing social determinants of health.
- Promote best practices that address social determinants of health.
- Promote education of health professionals regarding disparities in social determinants of health and environmental factors.

### **Strengthen infrastructure and data systems**

- Develop systems to facilitate and sustain coordination among community and government agencies that can affect social determinants of health and environmental factors.
- Use health IT to support the integration of public health, primary care, and behavioral health care.

### **Enable local innovations**

- Use the community health needs assessment (CHNA) process to engage partners across sectors to identify and prioritize community development opportunities to promote health and to spread best practices in the CHNA process.
- Develop Innovation Center model tests that enable local innovation in addressing the social determinants of health and improving health outcomes.
- Identify ways to leverage state and federal efforts to support local integration of resources that promote healthy communities (e.g., transportation, planning, recreation, education, and environment).

### **Foster learning organizations**

- Support clinician and health worker education and workforce development related to population health and strategies for effective coordination among clinical and community preventive services.
- Encourage multidisciplinary, cross-sector learning communities that bring together clinicians licensed providers, persons and families; community health workers; urban planners; public health agencies; and community stakeholders.



**Goal 5: Work with communities to promote best practices of healthy living**

Objectives	Desired Outcomes
Partner with and support federal, state, and local public health improvement efforts	<ul style="list-style-type: none"> <li>• Promote successful interoperability of health IT systems</li> <li>• Improve population health outcomes</li> <li>• Reduce disparities in health outcomes</li> <li>• Reduce health care costs through better coordination across health sectors</li> </ul>
Improve access within communities to best practices of healthy living	<ul style="list-style-type: none"> <li>• Children and adults have increased access to community-based preventive services</li> <li>• Evidence-based preventive services are widely shared and adopted by schools, families, and communities</li> <li>• Schools, families, and communities have the tools for promoting healthy living</li> <li>• Prevention-focused health care and community efforts are available, integrated, and mutually reinforcing</li> </ul>
Promote evidence-based community interventions to prevent and treat chronic disease	<ul style="list-style-type: none"> <li>• Promote effective diet, exercise, and other health behaviors that can ameliorate and control chronic diseases and behavioral health conditions</li> </ul>
Increase use of community-based social services and HCBS	<ul style="list-style-type: none"> <li>• People are routinely connected to relevant services offered by community organizations and other sources</li> <li>• Improved integration of health infrastructure, social services, and HCBS</li> </ul>

## Goal 6: Make care affordable

**Strategic Result: Quality care is affordable for individuals, families, employers, and governments.**

CMS is committed to better care, healthier people, and smarter spending. Although historically health care spending increased at a faster rate than the economy grew for decades, data since 2010 shows that the growth rate of health care spending has slowed to historic lows, thanks in part to health care reform efforts. Despite the decrease in the growth rate of spending, work remains to ensure access to high-quality, affordable care for consumers. Higher costs lead to underutilization of appropriate care and services, greater financial burden on the sickest and most vulnerable, and increased burden on providers and payers. CMS is the largest payer of health care in the United States, providing health coverage for more than 100 million individuals—about one in three Americans. As the largest payer, CMS has the ability to drive change in the health care system to reward high-value care.

Making sure the right care is delivered to the right person at the right time, every time, can also make care more affordable. Reducing costs goes hand-in-hand with the aims of expanding access, providing high-quality care, and promoting population health. Specifically, cost reduction may be achieved by:

- Reducing medical errors;
- Improving care coordination;
- Investing in health IT;
- Improving transparency of cost and quality data;
- Paying providers based on the quality and efficiency of care delivered;
- Developing and promulgating clinical and non-clinical guidelines and quality standards;
- Improving team management of complex patients with multiple comorbidities; and
- Increasing administrative efficiency.

CMS will foster these strategies for more affordable care by:

1. Establishing common measures that will help assess the cost impact of new programs and payment systems;
2. Improving data systems by encouraging and supporting Health Information Exchanges (HIE) that facilitate secure sharing of patient information;
3. Making utilization and cost of care data available to providers in a manner that is understandable and actionable;
4. Making health care costs and quality more transparent to consumers and providers, enabling them to make better choices and decisions;
5. Conducting the Quality Innovation Organization Learning and Action Network to change the way providers are paid, care is delivered, and information is distributed; and
6. Implementing national quality improvement programs and initiatives to systematically spread known best practices to reduce costs and improve care.

For example, the Medicare Shared Savings Program promotes the goal of reducing growth in expenditures for Medicare fee-for service beneficiaries. It encourages delivery of high-quality care through outcomes-based payment arrangements that link incentives to quality performance and total costs of care in Medicare Parts A and B. Other initiatives include the Hospital Value-Based Purchasing Program, which adjusts hospital payments made by Medicare for inpatient services based on hospitals' performance on measures that fall into a number of domains, including patient safety, clinical outcomes, and patient experience of care. The new MIPS and the transition of clinicians to Alternative Payment Models (APMs), as called for by the MACRA legislation, supports and reinforces the transformation of payment to clinicians based on value. CMS has also made data publicly available on the cost of services provided to Medicare beneficiaries by hospitals and physicians. Ultimately, CMS's goal is to link these cost data with provider performance on quality measures across settings of care.

Quality improvement initiatives that work in synergy with data transparency and payment incentives are also encouraging lower costs. According to the December 2014 report released by HHS, the "Interim Update on 2013 Hospital-Acquired Condition Rate," \$12 billion was saved as a result of a reduction in hospital-acquired conditions between 2010 and 2013.

CMS must also improve its ability to manage cost information internally to better identify key drivers of high costs and to look for outliers. CMS can use this information to identify opportunities to implement policies that drive down costs and support efforts to reduce fraud and abuse.

## **Goal 6 – Foundational Principles**

### **Eliminate disparities**

- Identify disparities in care through the stratification and analysis of claims data to recognize care patterns and gaps that do not adhere to established guidelines.

### **Strengthen infrastructure and data systems**

- Ensure that standardized race, ethnicity, primary language, geographical (rural/urban), sexual orientation and gender identity (SOGI), and disability information is collected to identify disparities in health care delivery outcomes to the extent permitted by law.
- Implement and test value-based payment models that link payment incentives to measures of cost and quality.
- Support health IT adoption and health information exchanges to track patterns of care and individual outcomes across-settings, which can identify opportunities to reduce cost and improve quality.
- Provide more frequent feedback on quality and cost data to providers to promote understanding of care patterns and gaps and to identify opportunities for improvement and care redesign.
- Make cost and quality information easily understandable and publicly available for all provider types.

### **Enable local innovations**

- Support the collection and interpretation of quality and cost data at the local level, which providers can use to target interventions for improving quality and reducing cost.
- Support local providers in developing innovative ways to make cost information transparent and understandable to consumers.

### **Foster learning organizations**

- Support health worker education about reducing inappropriate and unnecessary care, starting with treatments and tests highlighted in the Choosing Wisely® campaign.
- Strengthen the availability and delivery of team-based primary care by supporting learning and action networks and other community forums that can disseminate best practices and spread knowledge from high performers.

**Goal 6: Make care affordable**

Objectives	Desired Outcomes
Develop and implement payment systems that reward value over volume	<ul style="list-style-type: none"> <li>• Test new payment models to identify those that lead to improved health</li> <li>• New outcome and experience metrics are used for payment determinations</li> <li>• Outcomes-based payment arrangements link incentives to quality measures</li> <li>• Provider administrative burden is reduced</li> <li>• Access to quality primary and team-based care is expanded</li> <li>• Reduced cost and increased quality in all settings of care</li> </ul>
Use cost analysis data to Inform payment policies	<ul style="list-style-type: none"> <li>• Routinely review cost data by line of service and region to determine practice patterns and identify outliers</li> <li>• Improved analytic capacity to investigate cost drivers that inform payment model design and policies</li> <li>• Quality and cost data inform program integrity and fraud investigations via the Center for Program Integrity and other auditing and review capacities at CMS</li> </ul>



## Implementation and Evaluation

For CMS to manage its many health care quality improvement activities, respond quickly to new program priorities and requirements, and address an ever-growing workload with limited resources, we must excel at strategy management, strategic thinking, and action. This CMS Quality Strategy is designed as a tool to help CMS ensure that resources are directed toward agency priorities, operational risks are immediately identified, employees are held accountable for meeting the agency's quality goals and desired outcomes, and performance is effectively measured and reported. The strategy is a living document that evolves over time as initiatives are adjusted to meet the desired strategy outcomes and performance targets.

### Implementation

In the early phases of implementation of the 2014 Quality Strategy, CMS recognized the need to expand its implementation approach to address the comprehensive nature of the strategy's initiatives, some of which are within CMS's purview, while others involve engaging and collaborating with stakeholders in different HHS components. This led to the development of Affinity Groups to expand membership of the objective-led subgroups to support the breadth of the CMS Quality Strategy implementation.

The CMS Quality Strategy Affinity Groups are cross-functional teams of program managers and stakeholders that collaborate to achieve the strategy goals. The role of the Affinity Groups is to generate results for the CMS Quality Strategy by identifying and aligning all CMS levers to drive improvement on specific quality strategy goals and objectives, strengthening relationships within CMS, and building advocacy across HHS agencies. For example, the Person and Family Engagement Affinity Group works to coordinate all activities such as quality improvement, quality measurement, and technical assistance across all settings of care and all CMS programs. The group identifies and aligns these activities intentionally around the objectives and foundational principles of the CMS Quality Strategy. The Quality Strategy Affinity Group is responsible for overseeing and coordinating the implementation of the CMS Quality Strategy.

### Evaluation

CMS will continue to develop a comprehensive, agency-wide process to define, capture, and report short-term performance measures and long-term performance outcomes, as well as project milestones for CMS Quality Strategy goals. Evaluation of this Quality Strategy has two main components: First, we assess the extent to which the planned activities are implemented and the impact they have on the goals of the Quality Strategy; and second, we evaluate the impact and effectiveness of the quality improvement activities implemented throughout the national health care network. While the first component is primarily internal, the second relies on collaboration with many partners and stakeholders to develop, implement, and report performance data from a broad array of quality improvement activities across health care settings.

### Reporting

The CMS Quality Strategy will be revisited and updated biennially. Goal-level performance targets will be evaluated at least annually, depending on the reporting schedules of their specific performance measures. To highlight our accomplishments and progress toward achieving CMS's strategic goals, the Quality Strategy Affinity Group reports progress to CMS leadership. All Affinity Groups address progress

on our performance compared to the strategic goals and identifies any mid-course strategy adjustments. The performance management framework aligns our progress on CMS's strategic goals and objectives to the performance commitments of the senior executives responsible for moving those priorities forward. In turn, these expectations are incorporated into the performance plans of managers and employees.

Consistent with the Government Performance and Results Modernization Act (GPRAMA) (P. L. 111-353), CMS has consistently used meaningful, outcome-oriented, public-facing performance measures that highlight fundamental program purposes and focus on our role as a steward of taxpayer dollars. We maintain our commitment to achieving performance outcomes by continuing to develop a comprehensive and integrated approach to performance management that directly supports this plan as well as the CMS Strategy and the National Quality Strategy.

## Evaluation Methods

The evaluation of this ambitious quality improvement undertaking requires multiple methods of integrating quantitative and qualitative measures, process and outcome metrics, and innovative assessment strategies. The following subsections describe some of our current evaluation methods.

### Data-driven Improvement

To meet the need for urgent improvement in the nation's health care system, CMS is conducting its quality work with a strong commitment to continuous review of data and rapid testing of new interventions. This includes a cross-program commitment to:

- Monitor one or two quantifiable, project-level goals with deadlines, preferably defined as outcomes, against which progress can be tracked regularly;
- Review and respond to data and new ideas; and
- Set up simple, interim measurement systems, based on self-reported data and sampling, that are sufficient for achieving improvement (and complement summative evaluation approaches).

### Formative Evaluation

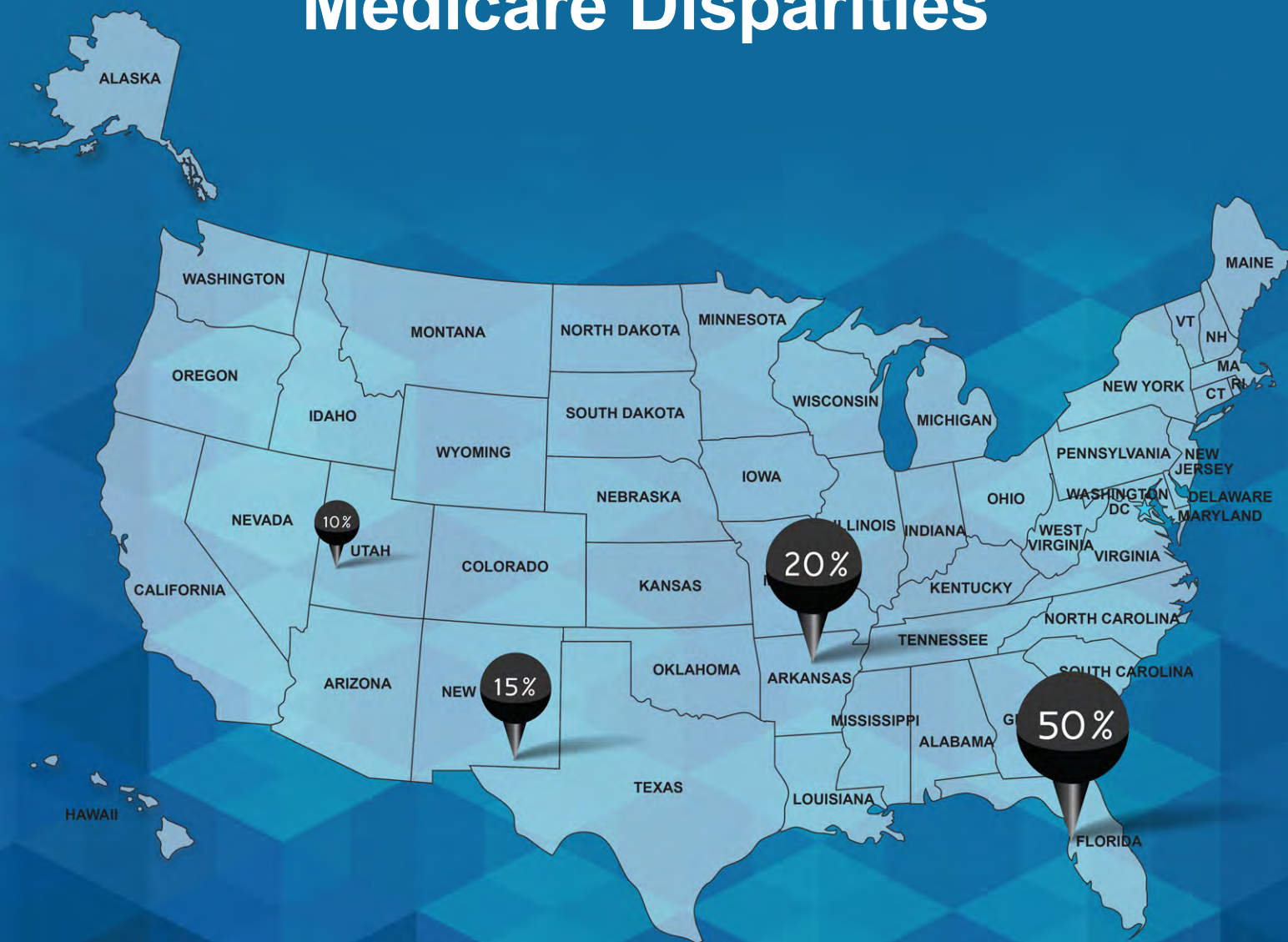
We conduct formative evaluation during and throughout a project to assess progress and to help agents and drivers identify ways to change activities to improve effectiveness. Formative evaluation questions include:

- What are the criteria for determining the effectiveness of goals and policies?
- What are the goals and objectives of the projects, and how well is CMS achieving them at this time?
- What will the agency do with the information gathered?
- What corrective actions, including terminating project activities, should be taken?
- To what extent does the progress align with the CMS Quality Strategy's Desired Outcomes?

We conduct summative evaluation annually to assess the impact of the Quality Strategy, and the extent to which we are realizing our goals and objectives. Summative evaluation questions include:

- What are the criteria for determining the effects of the Quality Strategy's goals and policies? To what extent have CMS's operational plans addressed the Quality Strategy?
- How can CMS use the data gathered from summative evaluation to inform the next cycle of strategic planning? How valid were CMS's assumptions over the course implementing the Quality Strategy? Do they still apply, and if not, why and how should they be revised?

# Mapping Medicare Disparities







# INTRODUCTION & BACKGROUND

Chronic diseases, such as diabetes and cardiovascular diseases, pose a significant problem in the United States, resulting in substantial morbidity, mortality, disability, and cost. In 2018, more than one-third of Medicare beneficiaries had multiple chronic conditions and accounted for 97% of Medicare spending.<sup>1</sup> Racial and ethnic minority communities are disproportionately affected by the disparities in disease, and the burden of disease differs by where individuals live.<sup>2</sup>

The Centers for Medicare & Medicaid Services (CMS) Office of Minority Health (OMH) released the first ***CMS Equity Plan for Improving Quality in Medicare***.

From this equity plan, CMS developed an interactive map to increase understanding of geographic disparities in chronic disease among Medicare beneficiaries. [The Mapping Medicare Disparities \(MMD\) Tool](#) identifies disparities between sub-populations (e.g., racial and ethnic groups) in health outcomes, utilization, and spending. The MMD Tool also allows quality measure comparisons between different hospitals at the national, state/territory, or county level. The MMD Tool is expected to help government agencies, policymakers, hospitals, researchers, community-based organizations, health providers, quality improvement organizations, and the general public analyze chronic disease disparities, identifying how a region or population may differ from the state or national average.

Understanding geographic differences in disparities is important to informing policy decisions and efficiently targeting populations and geographies for interventions.

Racial and ethnic minorities experience disproportionately higher rates of disease, inferior quality of care, and reduced access to care. The identification of areas with large numbers of vulnerable populations (including beneficiaries eligible for Medicare and dually eligible for Medicare and Medicaid) with chronic diseases will increase understanding of geographic differences in disparities, helping to inform policy decisions and better target interventions. This initiative provides an important first step on the path to health equality by improving the infrastructure for health equity activities and initiatives. CMS OMH collaborated with the Centers for Disease Control and Prevention (CDC), as well as other centers and offices within CMS, in designing the MMD Tool to ensure that it would add value by building on existing tools.

The MMD Population View presents health-related measures from Medicare claims by sex, age, dual eligibility for Medicare and Medicaid, race and ethnicity, original reason for entitlement, and state/territory and county via a public interactive website. The Hospital View allows users to compare quality measures between hospitals. The MMD Tool provides users with a quick and easy way to identify areas with large numbers of vulnerable populations and to target interventions to address racial and ethnic disparities. This issue brief provides an overview of the MMD Tool, highlighting five ways in which it can be used and how it differs from other federal mapping tools.



1. Center for Medicare and Medicaid Services (2018) Multiple chronic conditions. Retrieved from [https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Chronic-Conditions/MCC\\_Main](https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Chronic-Conditions/MCC_Main).  
2. Agency for Healthcare Research and Quality (AHRQ). 2019 National Healthcare Quality and Disparities Report. Publication No. 20(21)-0045-EF. Rockville, MD: AHRQ, December 2020.

## DESCRIPTION OF THE MMD TOOL

The MMD Tool provides a dynamic interface in two views, the Population View and the Hospital View. The Population View provides descriptive statistics on chronic disease prevalence, Medicare spending, hospital and emergency department (ED) utilization, preventive services, and preventable hospitalizations, average inpatient days per admission, patient safety indicator admissions, average Medicare reimbursement, inpatient admission type, inpatient admission discharge destination, readmissions, and mortality rates for specific Medicare beneficiary sub-populations, defined by state/territory, or county of residence, urban or rural location, sex, age, dual eligibility for Medicare and Medicaid, and race and ethnicity (i.e., white, black, Asian and Pacific Islander, Hispanic, American Indian/Alaska Native, and other). Users can view measures both at the state/territory and county levels, or urban/rural location. The Population View also offers built-in benchmarking features to investigate disparities:

- within counties and across racial and ethnic groups
- within racial and ethnic groups across counties

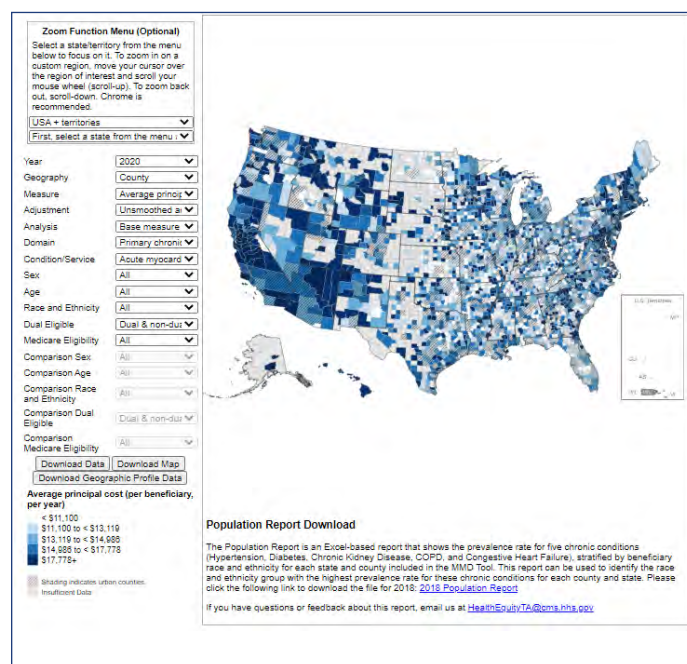
The Population View includes ten health outcome and five inpatient measures with information on up to 60 specific chronic conditions based on diagnostic information and allows the user to examine the prevalence of multiple chronic conditions grouped into four categories (i.e., 0, 1, 2, and 3 or more).

Additionally, the Population View includes information on the prevalence, costs, and hospitalizations of beneficiaries having ESRD and/or a disability based on the original or current reason for entitlement.

The MMD Tool Population View also includes COVID-19 prevalence and hospitalization data beginning with the year 2020. The COVID-19 measure can be found in the Domain drop down menu.

For a complete list of the chronic conditions, services, and measures presented by the MMD Population View, refer to Tables 1-3 below.

Using Hospital Compare data, the Hospital View allows users to identify disparities in selected health outcome and quality measures between hospitals at the state or county level. To view the measures included in the Hospital View, refer to Table 4 below. To review the data and methodology used for both the Population and Hospital Views, visit [The Mapping Medicare Disparities Tool: Technical Documentation](#).



**Table 1. Data and Definitions Used in the Mapping Medicare Disparities Tool — Chronic Conditions**

Measure	Prevalence Rates and Costs	Hospitalization Rates	AHRQ Prevention Quality Indicators (PQIs)	Readmission Rates	Mortality Rates	Emergency Department Visit Rates	AHRQ Patient Safety Indicators (PSIs) <sup>[8]</sup>
Method	Chronic Conditions Data Warehouse (CCW) methodology	Centers for Disease Control and Prevention (CDC) Interactive Atlas methodology or CCW methodology <sup>[1]</sup>	Agency for Healthcare Research and Quality (AHRQ) methodology	CMS 30-day risk-standardized methodology	CMS 30-day risk-standardized methodology	Research Data Assistance Center (ResDAC) methodology	Agency for Healthcare Research and Quality (AHRQ) methodology
Condition	<ul style="list-style-type: none"> <li>Acute Myocardial Infarction</li> <li>Alzheimer's Disease, Related Disorders, or Senile Dementia</li> <li>Asthma</li> <li>Atrial Fibrillation</li> <li>Breast Cancer</li> <li>Cancer (breast, colorectal, lung, and/or prostate) <sup>[2]</sup></li> <li>Chronic Kidney Disease</li> <li>Chronic Obstructive Pulmonary Disease (COPD)</li> <li>Colorectal Cancer</li> <li>Depression <sup>[3]</sup></li> <li>Diabetes</li> <li>Heart Failure</li> <li>Hyperlipidemia (high cholesterol)</li> <li>Hypertension</li> <li>Ischemic Heart Disease</li> <li>Lung Cancer</li> </ul>	<ul style="list-style-type: none"> <li>Acute Myocardial Infarction (CDC)</li> <li>Alzheimer's Disease, Related Disorders, or Senile Dementia (CCW)</li> <li>Asthma (CCW)</li> <li>Breast Cancer (CCW)</li> <li>Cancer (breast, colorectal, lung, and prostate) (CCW) <sup>[2]</sup></li> <li>Cardiac Dysrhythmia (CDC)</li> <li>Chronic Kidney Disease (CCW)</li> <li>COPD (CCW)</li> <li>Colorectal Cancer (CCW)</li> <li>Depression (CCW) <sup>[3]</sup></li> <li>Diabetes (CCW)</li> <li>Heart Failure (CDC)</li> <li>Hyperlipidemia (high cholesterol) (CCW)</li> <li>Hypertension (CDC)</li> <li>Ischemic Heart Disease (CDC)</li> </ul>	<ul style="list-style-type: none"> <li>Diabetes Short-term Complications (PQI 01)</li> <li>Perforated Appendix (PQI 02; retired in 2019)</li> <li>Diabetes Long-term Complications (PQI 03)</li> <li>COPD or Asthma in Older Adults (PQI 05)</li> <li>Hypertension (PQI 07)</li> <li>Heart Failure (PQI 08)</li> <li>Dehydration (PQI 10; retired in 2019)</li> <li>Bacterial Pneumonia (PQI 11)</li> <li>Urinary Tract Infection (PQI 12)</li> <li>Uncontrolled Diabetes (PQI 14)</li> <li>Lower-Extremity Amputation among Patients with Diabetes (PQI 16)</li> </ul>	<ul style="list-style-type: none"> <li>Acute Myocardial Infarction</li> <li>Heart Failure</li> <li>"All-Cause"</li> </ul>	<ul style="list-style-type: none"> <li>Acute Myocardial Infarction</li> <li>Heart Failure</li> </ul>	<ul style="list-style-type: none"> <li>Acute Myocardial Infarction</li> <li>Alzheimer's Disease, Related Disorders, or Senile Dementia</li> <li>Asthma</li> <li>Atrial Fibrillation</li> <li>Breast Cancer</li> <li>Cancer (breast, colorectal, lung, and/or prostate) <sup>[2]</sup></li> <li>Chronic Kidney Disease</li> <li>Chronic Obstructive Pulmonary Disease (COPD)</li> <li>Colorectal Cancer</li> <li>Depression <sup>[3]</sup></li> <li>Diabetes</li> <li>Heart Failure</li> <li>Hyperlipidemia (high cholesterol)</li> <li>Hypertension</li> <li>Ischemic Heart Disease</li> <li>Lung Cancer</li> <li>Obesity</li> <li>Osteoporosis</li> <li>Prostate Cancer</li> </ul>	<ul style="list-style-type: none"> <li>Death in Low Mortality DRGs (PSI 02)</li> <li>Pressure Ulcer (PSI 03)</li> <li>Death among Surgical Inpatients (PSI 04)</li> <li>Latrogenic Pneumothorax (PSI 06)</li> <li>Central Venous Catheter-Related Bloodstream Infections (PSI 07)</li> <li>Postoperative Hip Fracture (PSI 08)</li> <li>Postoperative Hemorrhage or Hematoma (PSI 09)</li> <li>Postoperative Physiologic and Metabolic Derangement Rate Numerator (PSI 10)</li> <li>Postoperative Respiratory Failure (PSI 11)</li> </ul>

1. Listed in the parentheses following each condition under the hospitalization measure is the agency (Centers for Disease Control and Prevention [CDC] or Chronic Condition Data Warehouse [CCW]) whose methodology was used for determining which of the International Classification of Diseases, 9th edition (ICD-9) diagnosis codes (valid until 2015 September), or International Classification of Diseases, 10th edition (ICD-10) diagnosis codes (effective October 1, 2015) are used to calculate hospitalization rates for each condition.

2. Cancer includes: breast cancer, colorectal cancer, prostate cancer, and lung cancer. An individual having two or more cancers from this list only is identified once as having cancer in our methodology.

3. Depression differs from the "Depressive Disorder" in Other Chronic or Potentially Disabling Conditions.

**Table 1. Data and Definitions Used in the Mapping Medicare Disparities Tool — Chronic Conditions (continued)**

Measure	Prevalence Rates and Costs	Hospitalization Rates	AHRQ Prevention Quality Indicators (PQIs)	Readmission Rates	Mortality Rates	Emergency Department Visit Rates	AHRQ Patient Safety Indicators (PSIs) <sup>[8]</sup>
Condition	<ul style="list-style-type: none"> <li>Obesity</li> <li>Osteoporosis</li> <li>Prostate Cancer</li> <li>Rheumatoid Arthritis / Osteoarthritis</li> <li>Schizophrenia/ Other Psychotic Disorders</li> <li>Stroke / Transient Ischemic Attack</li> <li>0, 1, 2, or 3+ Conditions <sup>[4]</sup></li> <li>Population-wide <sup>[5]</sup></li> <li>End Stage Renal Disease (ESRD)</li> <li>Disability</li> </ul>	<ul style="list-style-type: none"> <li>Lung Cancer (CCW)</li> <li>Obesity (CCW)</li> <li>Osteoporosis (CCW)</li> <li>Prostate Cancer (CCW)</li> <li>Rheumatoid Arthritis / Osteoarthritis (CCW)</li> <li>Schizophrenia/ Other Psychotic Disorders (CCW)</li> <li>Stroke (CDC)</li> <li>0, 1, 2, or 3+ Conditions, or "Overall", regardless of the condition specified <sup>[6]</sup></li> <li>ESRD</li> <li>Disability</li> </ul>	<ul style="list-style-type: none"> <li>Prevention Quality Overall Composite (PQI 90)</li> <li>Prevention Quality Acute Composite (PQI 91)</li> <li>Prevention Quality Chronic Composite (PQI 92)</li> </ul>			<ul style="list-style-type: none"> <li>Rheumatoid Arthritis / Osteoarthritis</li> <li>Schizophrenia/ Other Psychotic Disorders</li> <li>Stroke / Transient Ischemic Attack</li> <li>0, 1, 2, or 3+ Conditions, or "Overall", regardless of the condition specified <sup>[7]</sup></li> <li>ESRD</li> <li>Disability</li> </ul>	<ul style="list-style-type: none"> <li>Postoperative Pulmonary Embolism or DVT (PSI 12)</li> <li>Postoperative Sepsis (PSI 13)</li> <li>Postoperative Wound Dehiscence (PSI 14)</li> <li>Accidental Puncture or Laceration (PSI 15)</li> </ul>
Data	100% Claims (claim types depending on the condition), except for ESRD and disability which depend on the reason for entitlement from the 100% MBSF	100% Inpatient Claims	100% Inpatient Claims	100% Inpatient Claims	100% Inpatient Claims	100% Inpatient and Outpatient Claims	100% GVDB Inpatient Claims

4. Identifies the prevalence rate (i.e., not condition specific) for beneficiaries having 0, 1, 2, or 3 + conditions from the list above.

5. Only available for costs. It provides the costs (i.e., not condition specific) by demographic variables only, regardless of the number of chronic conditions.

6. Identifies the hospitalization rate (i.e., not condition specific) for beneficiaries having 0, 1, 2, or 3 + conditions from the list above. Overall hospitalization rate provides the rate by demographic variables only, regardless of the number of chronic conditions.

7. Identifies the emergency department visit rate (i.e., not condition specific) for beneficiaries having 0, 1, 2, or 3 + conditions from the list above. Overall emergency department visit rate provides the rate by demographic variables only, regardless of the number of chronic conditions.

8. Four inpatient measures do not require a pre-developed and validated methodology due to their straightforward definition. These measures are average inpatient days per admission, average Medicare reimbursement per admission, admission rate by admission type, and admission rate by discharge destination. Definition of these measures can be found later in this section.



**Table 2. Data and Definitions Used in the Mapping Medicare Disparities Tool — Other Chronic or Potentially Disabling Conditions**

Measure	Prevalence Rates, Costs, and Hospitalization Rates <sup>[1]</sup>	
Other Disabling Condition	<p><b>Congenital and Developmental Conditions</b> <sup>[2]</sup></p> <p>ADHD, Conduct Disorders, and Hyperkinetic Syndrome</p> <p>Autism Spectrum Disorders</p> <p>Cerebral Palsy</p> <p>Cystic Fibrosis and Other Metabolic Developmental Disorders</p> <p>Intellectual Disabilities and Related Conditions</p> <p>Learning Disabilities</p> <p><b>Liver Conditions</b> <sup>[2]</sup></p> <p>Liver Disease, Cirrhosis and Other Liver Conditions</p> <p>Viral Hepatitis (General)</p> <p><b>Mental Health and Substance Use Conditions</b> <sup>[2]</sup></p> <p>Anxiety Disorders</p> <p>Bipolar Disorder</p> <p>Depressive Disorders</p> <p>Post-Traumatic Stress Disorder (PTSD)</p> <p>Personality Disorders</p> <p>Schizophrenia/Other Psychotic Disorders <sup>[3]</sup></p> <p>Tobacco Use</p> <p>Opioid Use Disorder (OUD): Overarching OUD Indicator, Diagnosis- and Procedure-code-based OUD Indicator, Hospitalization and Emergency Room Visits-based OUD Indicator, and Utilization of Medication-Assisted Therapy based OUD Indicator <sup>[4]</sup></p> <p><b>Mobility Limitations and Chronic Pain Conditions</b> <sup>[2]</sup></p> <p>Fibromyalgia, Chronic Pain and Fatigue</p> <p>Multiple Sclerosis and Transverse Myelitis</p> <p>Mobility Impairments</p> <p>Muscular Dystrophy</p>	<p><b>Neurological Conditions</b> <sup>[2]</sup></p> <p>Epilepsy</p> <p>Migraine and Chronic Headache</p> <p>Spina Bifida and Other Congenital Anomalies of the Nervous System</p> <p>Spinal Cord Injury</p> <p>Traumatic Brain Injury and Nonpsychotic Mental Disorders due to Brain Damage</p> <p><b>Other Chronic or Disabling Conditions</b> <sup>[2]</sup></p> <p>Human Immunodeficiency Virus and/or Acquired Immunodeficiency Syndrome (HIV/AIDS)</p> <p>Leukemias and Lymphomas</p> <p>Obesity <sup>[3]</sup></p> <p>Peripheral Vascular Disease (PVD)</p> <p>Pressure and Chronic Ulcers</p> <p>Sensory - Blindness and Visual Impairment</p> <p>Sensory - Deafness and Hearing Impairment</p> <p><b>Other Developmental Delays</b></p>

1. All measures are based on CCW methodology: <https://www.ccwdata.org/web/guest/condition-categories>. Prevalence rates and costs are based on 100% of claims (claim types depending on the condition) while hospitalization rates are based on 100% of inpatient claims.

2. The six bolded conditions provide overall rates and costs for the conditions that are listed.

3. "Schizophrenia/Other Psychotic disorders" shown in Table 2 is included in the calculation of prevalence rates, costs, and hospitalization rates for "Mental Health and Substance Use Conditions." Similarly, obesity shown in Table 2 is included in the calculation of prevalence rates, costs, and hospitalization rates for "Other Chronic or Disabling Conditions."

4. CCW developed four Opioid Use Disorder (OUD) indicators. Indicator 1 is an overarching indicator that satisfies the criteria for Indicator 2, Indicator 3 or Indicator 4 that follow. Indicator 2 identifies OUD based on procedure and diagnosis codes. Indicator 3 identifies OUD based on hospitalization and emergency department visits due to opioid-related overdoses and poisoning events. Indicator 4 identifies OUD from the utilization of FDA approved drug for the treatment of MAT such as buprenorphine and naltrexone. All four indicators are available for prevalence rates. Only Indicator 1 is available for total cost, risk adjusted cost, hospitalization, and emergency department visits. Detailed definition of OUD indicators is available at <https://www.ccwdata.org/documents/10280/19139421/other-condition-algorithms-and-reference-list-opioids.pdf>.



**Table 3. Definitions Used in the Mapping Medicare Disparities Tool — Preventive Services**

Preventive Service	CPT/HCPCS Codes	Additional Criteria
<b>Alcohol Misuse Screening &amp; Counseling</b>	G0442, G0443	
<b>Annual Wellness Visit</b>	G0438, G0439	Services limited to beneficiaries no longer in the first 12 months of Medicare enrollment.
<b>Bone Mass Measurement</b>	G0130, 77078, 77079, 77080, 77081, 77083, 76977 0554T, 0555T, 0556T, 0557T, 0558T, 77085	
<b>Cardiovascular Disease Screening</b>	80061, 82465, 83718, 84478	
<b>Colorectal Cancer Screening</b>	G0104, G0105, G0106, G0120, G0121, 82270, G0328, 00812	Services limited to beneficiaries aged 50 or older.
<b>Counseling to Prevent Tobacco Use</b>	99406, 99407	
<b>Depression Screening</b>	G0444	
<b>Diabetes Screening</b>	82947, 82950, 82951	
<b>Diabetes Self-Management Training (DSMT)</b>	G0108, G0109	
<b>Glaucoma Screening</b>	G0117, G0118	
<b>Hepatitis B Vaccine</b>	90740, 90743, 90744, 90746, 90747, G0010	
<b>Hepatitis C Screening</b>	86803, 86804	
<b>HIV Screening</b>	G0432, G0433, G0435, G0475	
<b>Influenza Virus Vaccine</b>	90630, 90653, 90654, 90655, 90656, 90657, 90658, 90660, 90662, 90672, 90673, 90674, 90682, 90685, 90686, 90687, 90688, 90689, 90694, 90756, Q2034, Q2035, Q2036, Q2037, Q2038, Q2039, G0008	

**Table 3. Definitions Used in the Mapping Medicare Disparities Tool — Preventive Services (continued)**

Preventive Service	CPT/HCPCS Codes	Additional Criteria
<b>Initial Preventive Physical Examination (IPPE)</b>	G0402, G0403, G0404, G0405, G0468	Services limited to new beneficiary during the first 12 months of Medicare enrollment
<b>Intensive Behavioral Therapy (IBT) for Cardiovascular Disease (CVD)</b>	G0446	
<b>Intensive Behavioral Therapy (IBT) for Obesity</b>	G0447	
<b>Lung Cancer Screening Counseling and Annual Screening for Lung Cancer With Low Dose Computed Tomography (LDCT)</b>		
<b>Medical Nutrition Therapy (MNT) Services</b>	97802, 97803, 97804, G0270, G0271	
<b>Pneumococcal Vaccine</b>	90669, 90670, 90732, G0009	
<b>Prostate Cancer Screening</b>	G0102, G0103	Services limited to men aged 50 or older.
<b>Screening for Cervical Cancer with Human Papillomavirus (HPV) Tests</b>		
<b>Screening for Sexually Transmitted Infections (STIs) and High Intensity Behavioral Counseling (HIBC) to Prevent STIs</b>	86631, 86632, 87110, 87270, 87320, 87490, 87491, 87810, 87800, 87590, 87591, 87850, 86592, 86593, 86780, 87340, 87341, G0445	
<b>Screening Mammography</b>	77063, 77067	Services limited to women aged 35 or older.
<b>Screening Pap Test</b>	G0123, G0124, G0141, G0143, G0144, G0145, G0147, G0148, P3000, P3001, Q0091	Services limited to women.
<b>Screening Pelvic Examination</b>	G0101	Services limited to women.
<b>Ultrasound Screening for Abdominal Aortic Aneurysm (AAA)</b>	76706	

See the CMS Medicare preventive services quick reference guide for descriptions of the services and HCPCS/CPT codes:  
<https://www.cms.gov/Medicare/Prevention/PrevntionGenInfo/medicare-preventive-services/MPS-QuickReferenceChart-1.html>

**Table 4. Definitions Used in the Mapping Medicare Disparities Tool — Hospital View**

Domain	Sub-domain	Measures
<b>Readmissions<sup>1</sup></b>	Readmissions	<ul style="list-style-type: none"> <li>• Acute Myocardial Infarction (AMI) 30-Day Readmission Rate</li> <li>• Coronary Artery Bypass Grafting (CABG) 30-Day Readmission Rate</li> <li>• Chronic Obstructive Pulmonary Disease (COPD) 30-Day Readmission Rate</li> <li>• Heart Failure (HF) 30-Day Readmission Rate</li> <li>• Hip/Knee Replacement 30-Day Readmission Rate</li> <li>• Hospital 30-Day Readmission Rate (hospital-wide)</li> <li>• Pneumonia (PN) 30-Day Readmission Rate</li> </ul>
	Unplanned Hospital Visits	<ul style="list-style-type: none"> <li>• Rate of Unplanned Hospital Visits after Colonoscopy (per 1,000 colonoscopies)</li> <li>• Hospital Return Days for Heart Attack Patients</li> <li>• Hospital Return Days for Heart Failure Patients</li> <li>• Hospital Return Days for Pneumonia Patients</li> </ul>
<b>Safety</b>	Patient Safety Indicators (PSI)	<ul style="list-style-type: none"> <li>• PSI 3: Pressure Sores</li> <li>• PSI 4: Death among Patients with serious treatable complications after surgery.</li> <li>• PSI 6: Collapsed lung due to medical treatment</li> <li>• PSI 8: Broken hip from a fall after surgery</li> <li>• PSI 9: Perioperative hemorrhage or Hematoma rate</li> <li>• PSI 10: Postoperative Acute Kidney Injury Requiring Dialysis Rate</li> <li>• PSI 11: Postoperative Respiratory Failure Rate</li> <li>• PSI 12: Serious blood clots after surgery</li> <li>• PSI 13: Blood stream infections after surgery (Sepsis)</li> <li>• PSI 14: Split open wound after surgery on the abdomen or pelvis</li> <li>• PSI 15: Accidental cuts and tears from medical treatment</li> </ul>
	Mortality	<ul style="list-style-type: none"> <li>• Acute Myocardial Infarction (AMI) 30-Day Mortality Rate</li> <li>• Coronary Artery Bypass Grafting (CABG) 30-Day Mortality Rate</li> <li>• Chronic Obstructive Pulmonary Disease (COPD) 30-Day Mortality Rate</li> <li>• Heart Failure (HF) 30-Day Mortality Rate</li> <li>• Pneumonia (PN) 30-Day Mortality Rate</li> <li>• Stroke (STK) 30-Day Mortality Rate</li> </ul>
	Healthcare Associated Infections (HAIs)	<p>Standard Infection Ratios (SIR) for the following:</p> <ul style="list-style-type: none"> <li>• Central line – associated bloodstream infections (CLABSI) in ICUs and select wards</li> <li>• Central line – associated urinary tract infections (CAUTI) in ICUs and select wards</li> <li>• Surgical site infections (SSI) from colon surgery</li> <li>• Surgical site infections (SSI) from abdominal hysterectomy</li> <li>• Methicillin-resistant Staphylococcus Aureus (MRSA) blood infections</li> <li>• Clostridium difficile (C.diff.) intestinal infections</li> </ul>
	Hip/Knee Complications	Hip/Knee Complications

1. All readmission measures are based on a 30-day risk-standardized rate.

**Table 4. Definitions Used in the Mapping Medicare Disparities Tool — Hospital View (continued)**

Domain	Sub-domain	Measures
<b>Medicare Spending</b>	Value of Care	<ul style="list-style-type: none"> <li>• Value of Care Heart Attack measure</li> <li>• Value of Care Hip/Knee Replacement measure</li> <li>• Value of Care Heart Failure measure</li> <li>• Value of Care Pneumonia Measure</li> <li>• Medicare Spending per Beneficiary</li> </ul>
<b>Patient Experience</b>	Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey	<ul style="list-style-type: none"> <li>• Care transition – star rating</li> <li>• Cleanliness – star rating</li> <li>• Communication about medicines – star rating</li> <li>• Discharge information – star rating</li> <li>• Doctor communication – star rating</li> <li>• Nurse communication – star rating</li> <li>• Overall hospital rating – star rating</li> <li>• Quietness – star rating</li> <li>• Recommended hospital – star rating</li> <li>• Staff responsiveness – star rating</li> <li>• Summary star rating</li> </ul>
<b>Hospital Value Based Purchasing (HVPB)</b>	None	<p>Unweighted Scores for each HVPB domain:</p> <ul style="list-style-type: none"> <li>• Unweighted Normalized Clinical Care Domain Score</li> <li>• Unweighted Normalized Efficiency Domain Score</li> <li>• Unweighted Patient and Caregiver Centered Experience Care/Care Coordination Domain Score</li> <li>• Unweighted Normalized Safety Domain Score</li> </ul> <p>Total Performance Score (TPS)</p>
<b>Inpatient Psychiatric Facility Quality Reporting (IPFQR)</b>	None	<ul style="list-style-type: none"> <li>• Hours of physical restraint use</li> <li>• Hours of seclusion</li> <li>• Patients discharged on multiple antipsychotic medications with appropriate justification</li> <li>• Influenza Immunization</li> <li>• Alcohol Use Brief Intervention Provided or Offered</li> <li>• Alcohol Use Brief Intervention</li> <li>• Tobacco Use Treatment Provided or Offered (during the hospital stay)</li> <li>• Tobacco Use Treatment (during the hospital stay)</li> <li>• Tobacco Use Treatment Provided or Offered at Discharge</li> <li>• Tobacco Use Treatment at Discharge</li> <li>• Medication Continuation Following Inpatient Psychiatric Discharge</li> </ul>

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2. Each unweighted score is equally weighted to calculate the Total Performance Score (TPS).

**Table 4. Definitions Used in the Mapping Medicare Disparities Tool —  
Hospital View (continued)**

Domain	Sub-domain	Measures
<b>Prospective Payment System (PPS) – Exempt Cancer Hospital Quality Reporting (PCHQR)</b>	Oncology Care	<ul style="list-style-type: none"> <li>• Plan of Care for Pain – Medical Oncology and Radiation Oncology</li> </ul>
	Exempt Cancer Hospital Quality Reporting	<ul style="list-style-type: none"> <li>• Clostridium Difficile (C.Diff): SIR</li> <li>• MRSA Bacteremia: SIR</li> <li>• SSI - Colon Surgery: SIR</li> <li>• SSI - Abdominal Hysterectomy: SIR</li> <li>• Influenza Vaccination Coverage among Healthcare Personnel: Adherence Rate</li> </ul>
<b>Effective Care</b>	Effective Care	<ul style="list-style-type: none"> <li>• Appropriate Care for Severe Sepsis and Septic Shock</li> </ul>

- 
1. All readmission measures are based on a 30-day risk-standardized rate.
  2. Each unweighted score is equally weighted to calculate the Total Performance Score (TPS).



## MMD Tool Population

The MMD Population View presents information for Medicare beneficiaries age 65 years or older, persons under age 65 with certain disabilities, and persons of any age with ESRD. Medicare beneficiaries with any Medicare Advantage enrollment during the year are excluded since claims data are not available for these beneficiaries. Beneficiaries who died during the year are included up to their date of death, if they meet the other inclusion criteria described above. The Hospital View includes data from both fee-for-service beneficiaries, as well as Medicare Advantage beneficiaries.

## Data Source

The MMD Population View is based on the CMS administrative claims data<sup>3</sup> for Medicare beneficiaries enrolled in the fee-for-service program and Geographic Variation Database Beneficiary (GVDB) Summary Files. The FFS files are available from CMS through the Chronic Conditions Data Warehouse, including beneficiaries who are also eligible for Medicaid.<sup>4</sup> These claims files are known as the CMS Research Identifiable Files (RIFs), which consist of the Denominator File—with beneficiary eligibility, enrollment, and characteristics data—and final action items for services covered by Medicare Part A (hospital insurance) and Part B (medical insurance). The prevalence rates are based on 100 percent of Part A and Part B claims. The hospital utilization, preventable hospitalization, and readmission and mortality rates are based on 100 percent of inpatient claims, while ED utilization rates

are based on 100 percent of inpatient and outpatient claims. GVBD inpatient files include beneficiary eligibility, enrollment, and beneficiary characteristic data.

The data used in the Hospital View analysis is sourced from various data sources (e.g., CMS administrative claims for Medicare beneficiaries enrolled in the program, patient surveys), which are available from CMS via the Hospital Compare database.

## Protection of Beneficiary Confidentiality & Privacy

The underlying data in the MMD Tool is certified as de-identified according to the HIPAA Privacy Rule. In addition, the MMD Tool performs a series of checks and data suppression decisions based on the size of the selected measure's study population and the share of the study population that leads to the calculated domain/measure (e.g., hospitalization rate). If the study population for the chosen set of beneficiary characteristics (i.e., every combination of state/territory and county of residence, sex, age group, racial and ethnic group, original reason for entitlement, and dual eligibility indicator) is less than 11 beneficiaries, the MMD Tool will not display the chosen domain or measure. Also, if the number of beneficiaries for the numerator of a measure (e.g., beneficiaries who are hospitalized) is less than three but greater than zero, the MMD Tool will display 0 percent.



3. The MMD Tool provides measures for 2012-2020. However, the methodology for the prevalence of chronic conditions requires up to three years of claims, making 2010-2011 data necessary.

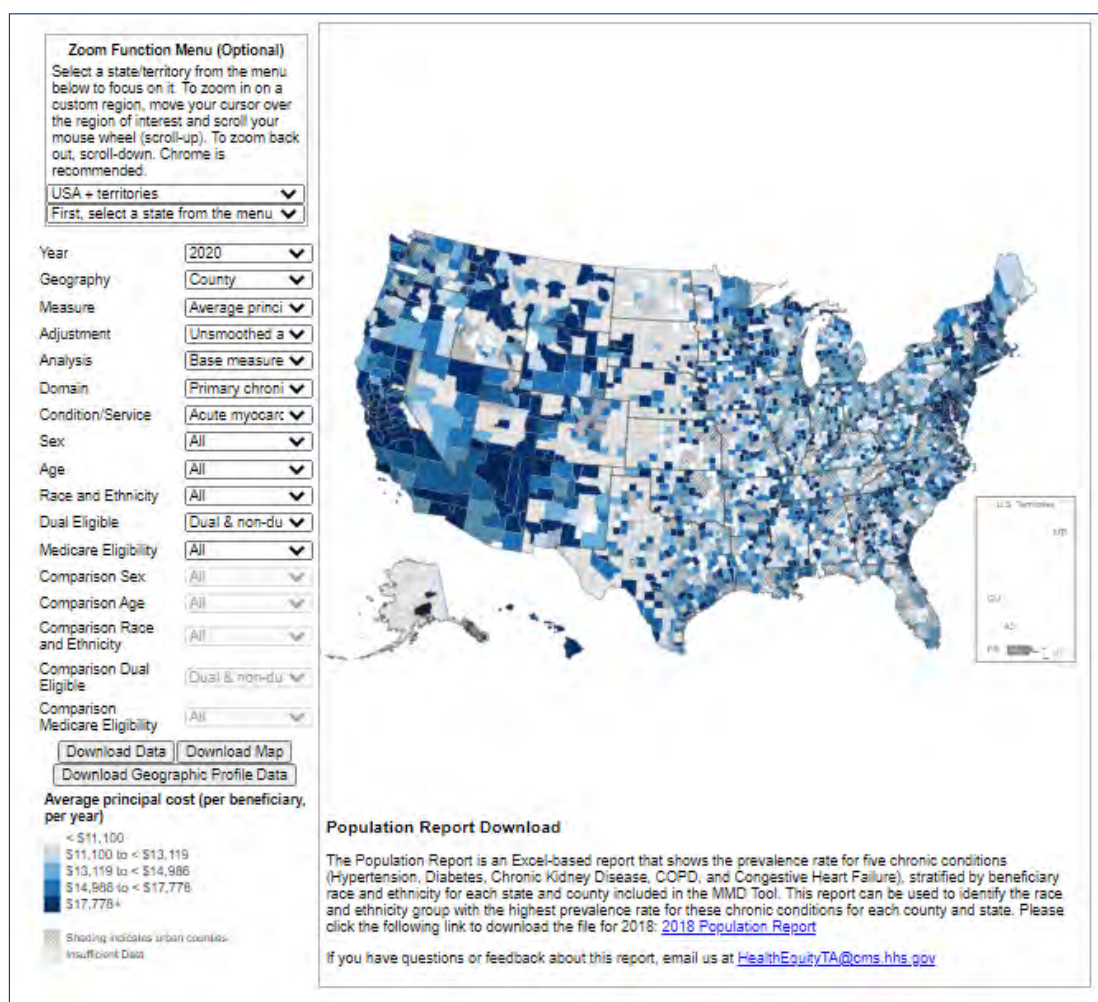
4. See [www.ccwdata.org](http://www.ccwdata.org). Data dictionaries for CMS RIFs can be found on [www.resdac.org](http://www.resdac.org).

## Utilizing The MMD Tool

The MMD Tool provides users with a dynamic, interactive experience that can be used in a variety of ways. Some of the features that the MMD Tool provides are the ability to:

- Visualize health outcomes (e.g., prevalence rates) at a national, state/territory, or county level, or by urban/rural location.
- Identify health outcomes by select beneficiary characteristics (e.g., by age, race and ethnicity, sex, etc.)
- Compare differences between two geographic locations (e.g., benchmark against the national average)
- Compare differences between beneficiary characteristics within the same geographic area
- Compare quality measures by hospital
- Download maps at the county, state/territory, or national level.

A screenshot of the MMD Tool is provided below:



## FIVE EXAMPLES OF THE MMD TOOL

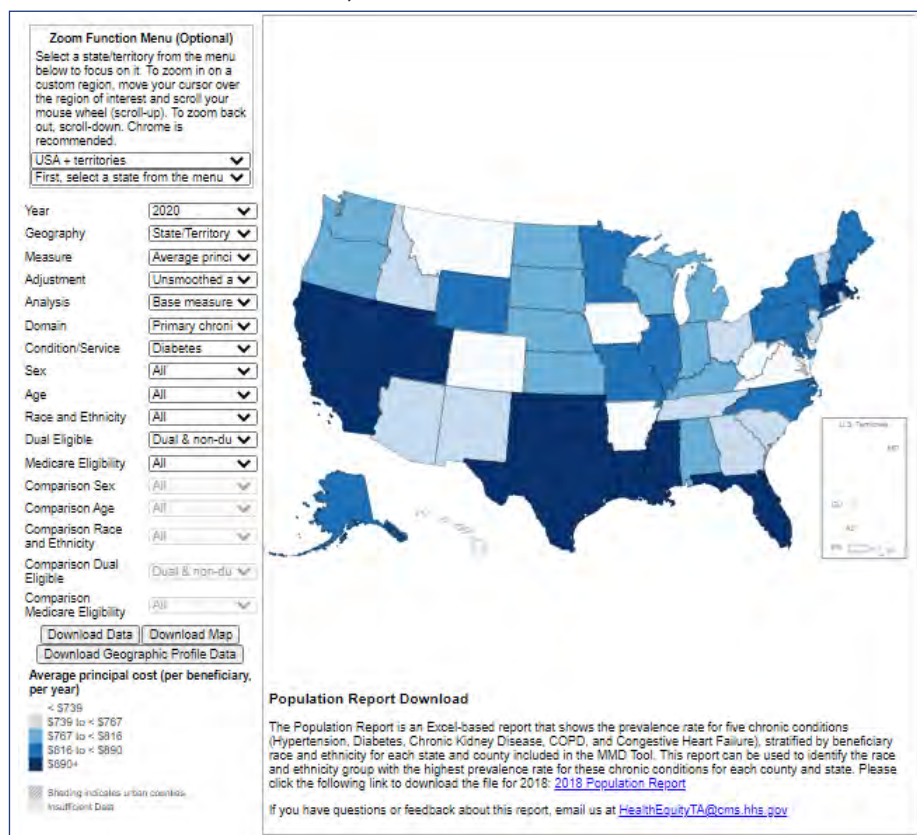
Here are five examples of what can be done using the [MMD Tool](#). First, we will walk through examples using the MMD Population View. The MMD Population View allows users to build a query step-by-step. A user can choose to use all of the menus provided by the MMD Population View, or to leave one or more of the menus unselected, which will then default to “All.” Not all of the menu options provided by the MMD Population View are utilized in the examples provided.

### Example 1

Using the MMD Population View, a user can identify specific regions (e.g., states, territories, counties, or urban/rural locations) of the United States that perform much worse than others for a specific chronic condition or service.

Suppose a user is interested in addressing the prevalence of diabetes among Medicare beneficiaries, and would like to locate the region where the impact of health initiatives could be the largest. The MMD Tool can provide this information in six steps:

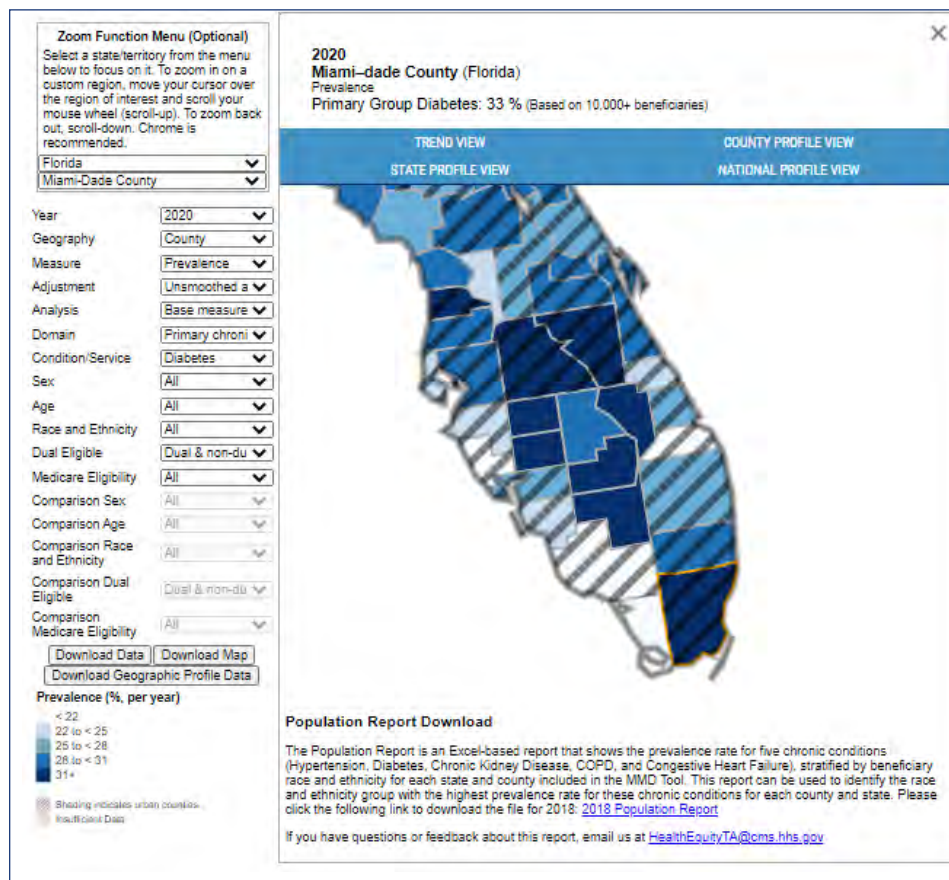
- From the **Year** menu, select “2020.”
- From the **Geography** menu, select “State/Territory.”
- From the **Measure** menu, select “Prevalence.”
- From the **Analysis** menu, select “Base Measure.”
- From the **Domain** menu, select “Primary Chronic Conditions.”
- From the **Condition/Service** menu, select “Diabetes.”





Using the MMD Population View, a user can see that in 2020, the southern portion of the United States had the highest rates of diabetes among the Medicare population, and that it might be a good area to start investing in preventive programs. A user may manually zoom in on the map to an area of interest, or select the state of interest from the state dropdown menu. Noticing that Florida has very high rates of diabetes (identified by dark coloring on the MMD Tool) among the Medicare population, a user can examine which counties within Florida are the worst performers.

- From the **Geography** menu, replace “**State/Territory**” with “**County.**”
- From the **USA + Territories** menu, select “**Florida.**”
- From the **Select A County** menu, select “**Miami-Dade County.**”



The MMD Population View shows that, in 2020, Miami-Dade County, Florida, experienced very high rates of diabetes among the Medicare population, with approximately 33 percent of beneficiaries having been diagnosed with diabetes.

## Example 2

The MMD Population View also allows a user to view the data based on a specific sub-population within a county or state. For example, if the same user in the previous example is interested in the rate of diabetes among Hispanic males, age 65 to 74, in Miami-Dade County, Florida, the MMD Population View will provide this information with the following additional selections:

- From the **Sex** menu, select “**Male.**”
- From the **Age** menu, select “**65–74.**”
- From the **Race and Ethnicity** menu, select “**Hispanic.**”

The MMD Population View shows that 33 percent of Hispanic males, age 65 to 74, in Miami-Dade County, Florida, were diagnosed with diabetes among the Medicare population.

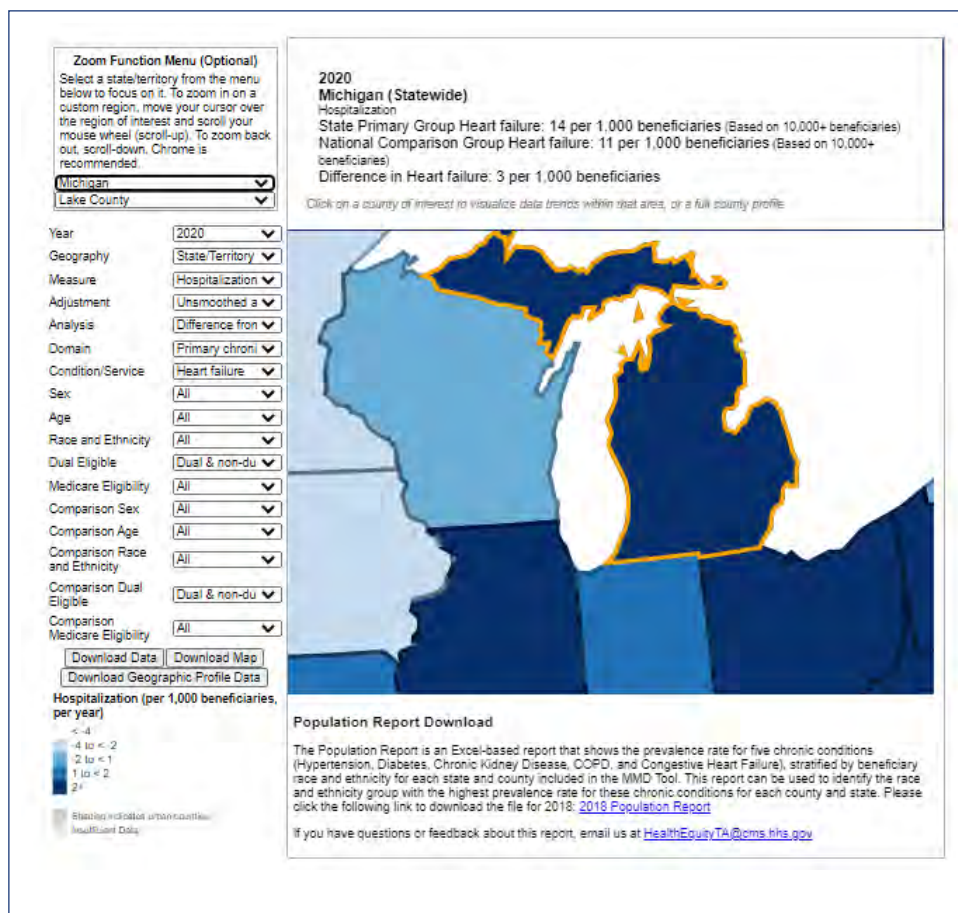
## Example 3

Using the MMD Population View, a user can also analyze the *differences* in rates between a specific geographic location (i.e., state, territory, or county) for a selected measure and the national, state/territory, or county average rate.

Suppose a user is interested in how the 2020 rate of heart failure (HF) hospitalizations among Medicare beneficiaries in the state of Michigan compares to the national average. This information can be obtained from the MMD Population View in seven steps:

- From the **Year** menu, select “2020.”
- From the **Geography** menu, select “State/Territory.”
- From the **Measure** menu, select “Hospitalization.”
- From the **Analysis** menu, select “Difference from National Average.”
- From the **Domain** menu, select “Primary Chronic Conditions.”
- From the **Condition/Service** menu, select “Heart Failure.”
- From the **USA + Territories** menu, select “Michigan.”

After completing these steps, the MMD Population View will update to inform the user that in 2020, the state of Michigan experienced approximately 3 more hospitalizations per 1,000 beneficiaries as a result of HF compared to the national average.

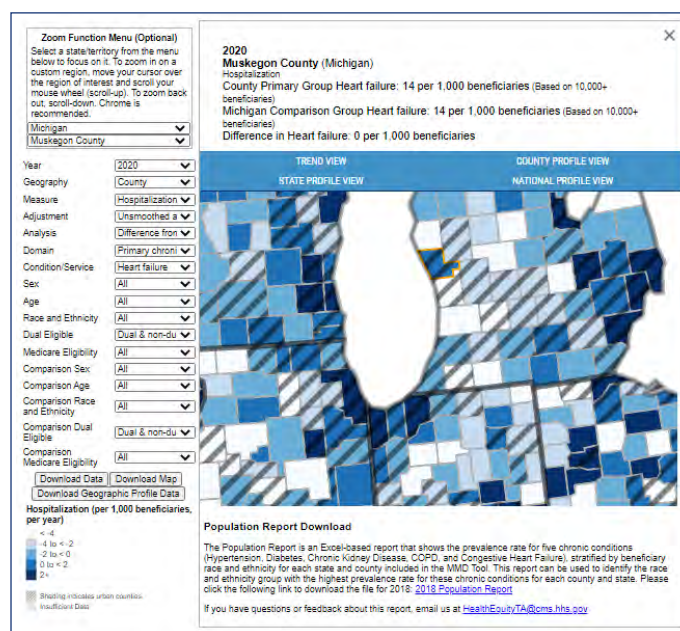




Suppose the user is further interested in how a specific county's (e.g., Muskegon County, Michigan's) rate of HF hospitalizations compares to the state average rate of HF hospitalizations. The MMD Tool can also provide this information by making the following replacement selections:

- From the **Geography** menu, replace “**State/Territory**” with “**County**.”
- From the **Analysis** menu, select “**Difference from State/Territory Average**” instead of “**Difference from National Average**.”
- From the **Select A County** menu, select “**Muskegon County**.”

Following the completion of these steps, the MMD Population View will inform the user that in 2020, Medicare beneficiaries in Muskegon County, Michigan experienced approximately the same number of hospitalizations as a result of HF compared to the state average (14 per 1,000 beneficiaries)

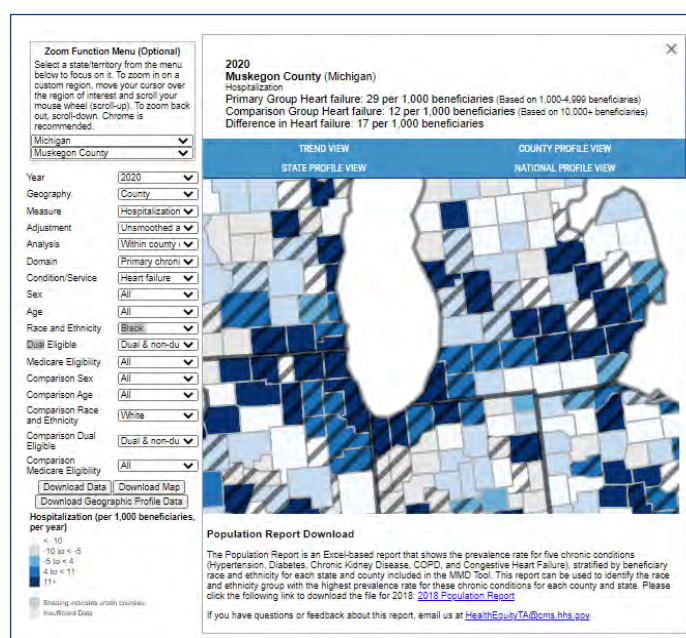


## Example 4

Continuing from the example above, the MMD Population View can also show a user how the rates of HF hospitalizations differ among two racial and ethnic groups *within the same county*. For example, suppose a user is interested in the rate of HF hospitalizations among Black Medicare beneficiaries in Muskegon County, Michigan compared to the 2020 rate of HF hospitalizations among White Medicare beneficiaries in the *same county*. The MMD Population View can be used to obtain this information by making the following replacement selections:

- From the **Analysis** menu, select “**Within County Difference**” instead of “**Difference from State Average**.”
- From the **Race and Ethnicity** menu, select “**Black**.”
- From the **Comparison Race and Ethnicity** menu, select “**White**.”

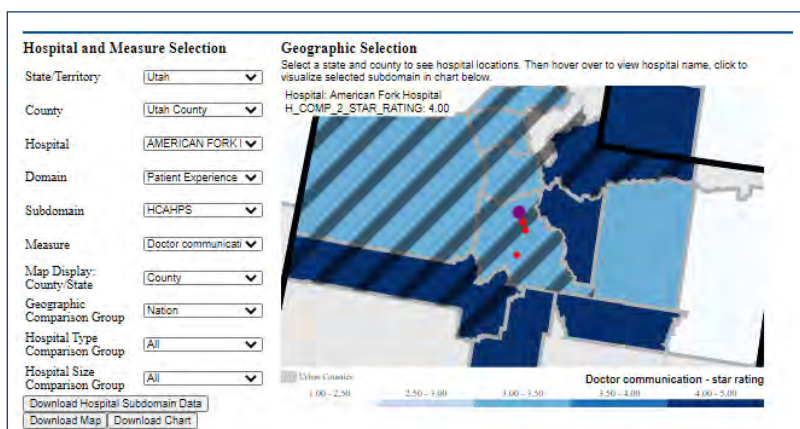
The MMD Population View will then inform the user that in 2020, Black Medicare beneficiaries in Muskegon County, Michigan experienced approximately 17 more hospitalizations per 1,000 beneficiaries as a result of HF than White Medicare beneficiaries in the same county.



## Example 5

Using the MMD Hospital View, a user can compare hospital quality measures between hospitals based on geography, hospital type, hospital ownership, and/or hospital size.

Suppose a user is interested in patient experience measures between different hospitals in Utah County, Utah. The MMD Hospital View can provide this information with the following steps:



- From the **State/Territory** menu, select “**Utah.**”
- From the **County** menu, select “**Utah County.**”
- From the **Hospital** menu, select “**American Fork Hospital.**” The American Fork Hospital will be highlighted as a purple dot on the map; other hospitals in Utah County will be highlighted as red dots.
- From the **Domain** menu, select “**Patient Experience**” The **Subdomain** menu will automatically populate with the “**HCAHPS**” quality metrics.
- From the **Measure** menu, select “**Doctor Communication.**”

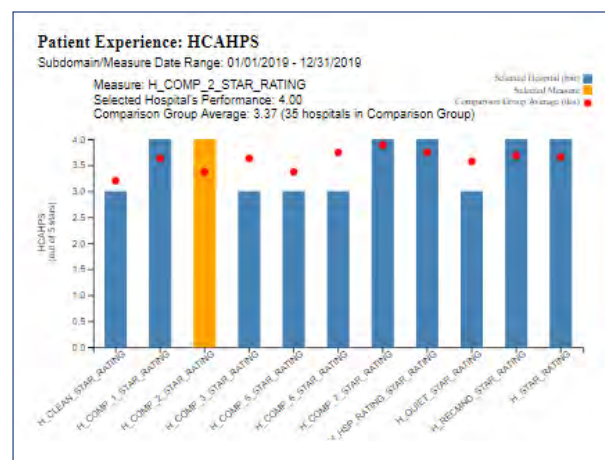
The user will see that the American Fork Hospital has an HCAHPS Doctor Communication rating of 4.00. The other four hospitals in Utah County have Doctor Communication ratings of 2.00 or 3.00.

In addition to viewing the hospitals on the map, a user may view all HCAHPS measures in a bar chart below the map, which displays the selected metric, **Doctor Communication** with an orange bar. Next to the chart the user will see the selected hospital’s information including type, size, ownership, and address.

To compare a user’s selected hospital to other hospitals, the user may select from the **Geographic Comparison Group**, **Hospital Type Comparison Group** or **Hospital Size Comparison Group** drop down menus. Suppose a user is interested in how American Fork Hospital’s HCAHPS ratings compare to the state average.

- From the **Geographic Comparison Group** menu, select “**State.**”

The MMD Hospital View displays American Fork Hospital’s HCAHPS ratings as bars in the bar chart, with Utah’s overall state ratings as red comparison dots. American Fork Hospital shows a higher **Doctor**



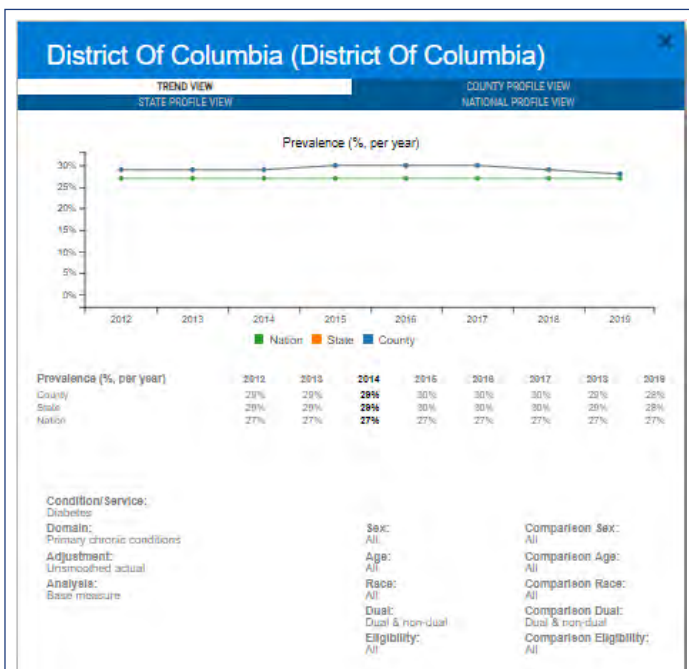
**Communication** rating than the state, with a 4.00 versus Utah’s overall state rating of 3.37.



# OTHER FEATURES OF THE MMD POPULATION VIEW

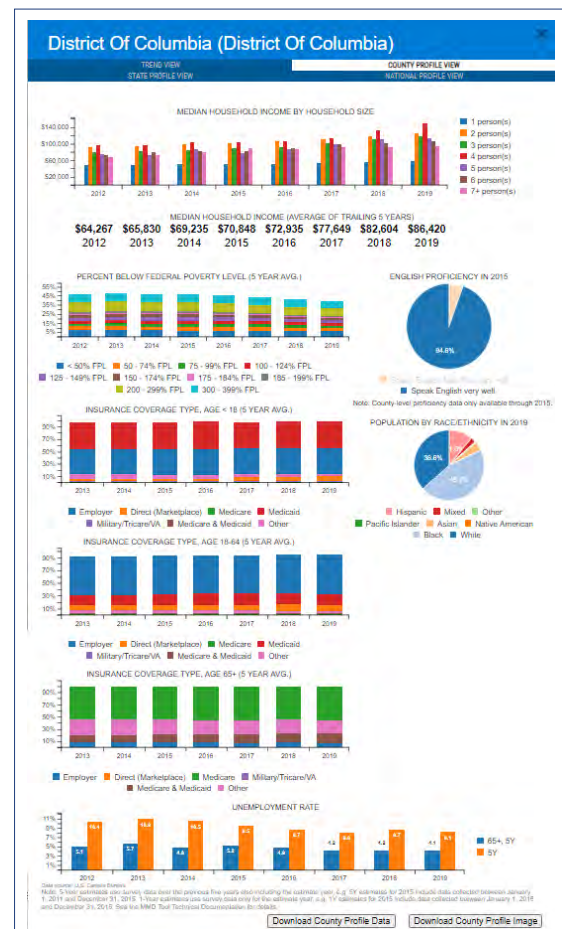
## Trend View

The MMD Population View allows users to analyze trends for all health measures. By clicking on a county, and then selecting “Trend View”, users can view line charts for the selected metric together with state and national benchmarks. This view also allows users to download the resulting image to their computers.



# County, State, and National Profile Views

The MMD Population View provides socio-economic variables in three profiles, at the county, state, and national level. The variables displayed in these profiles include: median household income by household size, median household income, percentage below the poverty level, insurance coverage type by age, unemployment rate, English proficiency rate, and population by race/ethnicity. By clicking on a county and then selecting “County Profile View” users can view these socioeconomic variables for the selected county. To view the socio-economic variables for a selected state or nationally, click on “State Profile View” or “National Profile View”. The socio-economic variables are not specific to the Medicare population, but some variables include data for individuals that are 65 or older.



## NEXT STEPS

**CDC Interactive  
Atlas of Heart  
Disease and Stroke**

The MMD Tool distinguishes itself from the CDC Interactive Atlas by providing users with additional diseases and measures, as well as offering additional racial and ethnic groups and age groups from which to select.

The screenshot displays the ArcGIS Online web interface. On the left, a sidebar contains a list of layers and a search bar. The main map area shows a choropleth map of the United States. A legend in the bottom right corner, titled 'Legend', shows a color scale from light yellow to dark red, with values ranging from 0.00 to 0.00. The map shows a high density of red areas, particularly in the eastern half of the country.

## CMS Medicare C h r o n i c Conditions Dashboard

The Medicare Chronic Conditions Dashboard(s) is a set of four geographically defined interactive tools that present information on prevalence, utilization (ED visits and hospital readmissions) and Medicare spending for Medicare FFS beneficiaries with 17 chronic conditions and multiple chronic conditions.

The information is presented for the U.S. Department of Health and Human Services/ CMS regions, states, counties, and hospital referral regions. The region- and state-level dashboards also allow the user to select information for specific beneficiary sub-groups defined by sex, age group, and Medicare and Medicaid enrollment (dual eligibility status), though not by race and ethnicity. The dashboards present data for 2018.

The MMD Tool distinguishes itself from the CMS Medicare Chronic Conditions Dashboard by beneficiary race and ethnicity, the ability to view these measures in U.S. territories and by urban/ rural location, and to compare certain measures by hospital.

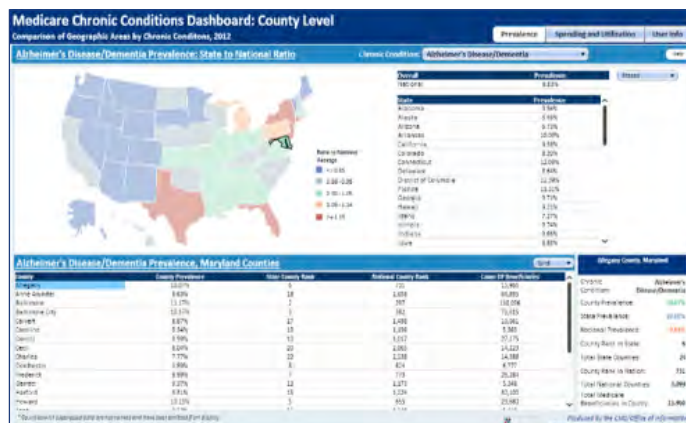
## CMS Geogr aphic Vari ation Dashboard

The CMS Geographic Variation Dashboard provides users with a tool to identify geographic differences that exist in Medicare spending by service type (e.g., inpatient, post-acute care, hospice, physician, etc.) across multiple years (from 2014–2018). These features allow users to view how spending, across all service types, has changed over time in a state or county, as well as how spending within a specific county compares to all the other counties in the selected county's state, the state's average, and the national average.

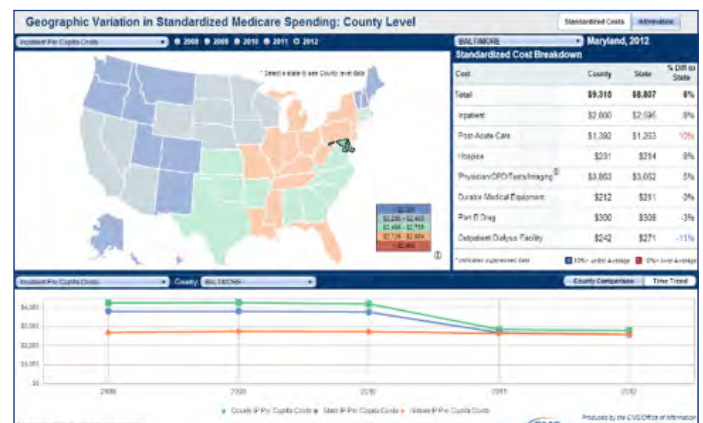
This dashboard also provides users with rankings of counties within a state with regards to Medicare spending.

The MMD Tool distinguishes itself from the CMS Geographic Variation Dashboard by providing users with the ability to filter total costs by disease and beneficiary characteristics (e.g. sex, age, or race and ethnicity), the ability to view these measures in U.S. territories and by urban/ rural location, and to compare certain measures by hospital.

### CMS Medicare Chronic Conditions Dashboard.



### CMS Geographic Variation Dashboard.



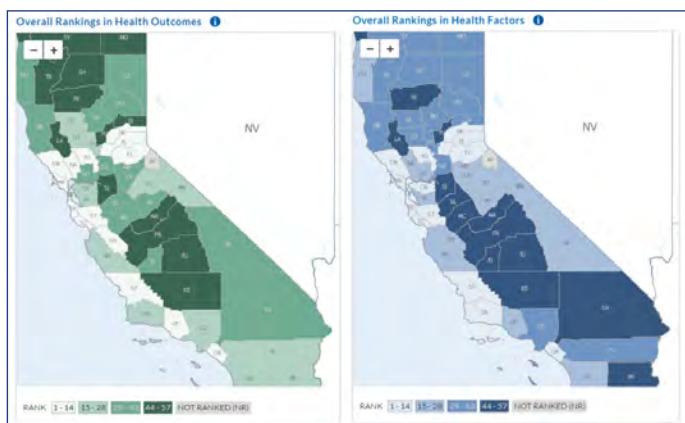


## County Health Rankings & Roadmaps

The County Health Rankings & Roadmaps provides users with a tool to identify relationships that may exist between a state's or county's health-related factors (i.e., social and economic, clinical care, behavioral, and environmental factors) and its health-related outcomes (i.e., the average length of life and the quality of life). Using the tool, a user can also identify how a state's or county's performance (as measured by its rankings in health-related outcomes and health-related factors) has changed over time relative to other states or counties from 2011 through 2020.

The information provided by the County Health Rankings & Roadmaps—specifically with regards to behavioral factors (e.g., tobacco use, alcohol and drug use, sexual activity) and social and economic factors (e.g., education, employment, and income level)—can be used in conjunction with the MMD Tool to analyze potential correlation between health-related factors and disease prevalence and other measures in the MMD Tool.

### County Health Rankings & Roadmaps.



The MMD Tool distinguishes itself from the County Health Rankings & Roadmaps tool by providing users with additional health-related outcome and performance measures, the ability to view these measures by beneficiary characteristics (e.g., sex, age, or race and ethnicity), and the ability to view these measures in U.S. territories and by urban/rural location.

## CONCLUSION

The MMD Tool is expected to be a useful new resource for government agencies, policymakers, hospitals, researchers, community-based organizations, health providers, quality improvement organizations, and the general public to identify and explore different facets of Medicare chronic disease disparities. Using the MMD Tool, organizations can identify regions and populations where Medicare outcomes differ from state/territory or national averages, or from urban versus rural locations, thereby allowing policymakers to develop and target strategies and programs to eliminate disparities that exist between different populations (e.g., racial and ethnic groups). The MMD Tool offers data stratified by beneficiary characteristics to support the development of tailored interventions to reduce gaps in care. It also can be used by researchers and academics as a starting point to identify important health-related questions that impact the Medicare population. Finally, given that the MMD Tool visually summarizes large amounts of data in a simple format, users with a wide diversity in data sophistication may take advantage of the breadth of information contained in the MMD Tool.

***To access the MMD Tool, visit:***

<https://www.cms.gov/About-CMS/Agency-Information/OMH/OMH-Mapping-Medicare-Disparities.html>

## REFERENCES

The technical documentation for the MMD Tool can be viewed at [The Mapping Medicare Disparities Tool: Technical Documentation](#).

## CORRESPONDENCE

Any questions or concerns related to the MMD Tool can be addressed to:  
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The MMD Tool was developed by CMS OMH in collaboration with NORC at the University of Chicago as part of the CMS Equity Plan for Improving Quality in Medicare.



# Rural-Urban Disparities in Health Care in Medicare

November 2019





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# Executive Summary



This report describes the quality of health care received in 2018 by Medicare beneficiaries nationwide. Specifically, the report highlights rural-urban<sup>1</sup> differences in health care experiences and clinical care and looks at how rural-urban differences vary by race and ethnicity and how racial and ethnic differences vary between rural and urban areas.

The report is based on an analysis of two sources of information. The first source is the Medicare Consumer Assessment of Healthcare Providers and Systems (CAHPS) survey, which is conducted annually by the Centers for Medicare & Medicaid Services (CMS) and focuses on health care experiences (e.g., ease of getting needed care, how well providers communicate, and getting needed prescription drugs) of Medicare beneficiaries across the nation. The second source of information is the Healthcare Effectiveness Data and Information Set (HEDIS). HEDIS is comprised of information collected from medical records and administrative data on the technical quality of care that Medicare beneficiaries receive for a variety of medical issues, including diabetes, cardiovascular disease, and chronic lung disease. Whereas Medicare CAHPS data are available for beneficiaries enrolled in Medicare fee-for-service (FFS) and managed care (Medicare Advantage [MA]) plans, HEDIS data are available only for beneficiaries enrolled in MA plans.

### ***Rural-Urban Disparities in Health Care in Medicare***

With just one exception, both FFS and MA beneficiaries living in rural areas reported health care experiences that were similar to the experiences reported by FFS and MA beneficiaries living in urban areas (see Figure 1). The exception pertained to the annual flu vaccination rates, which were higher for urban than for rural FFS beneficiaries (among MA beneficiaries rates were similar for urban and rural residents). In contrast, rural-urban disparities in clinical care were widespread: MA beneficiaries living in rural areas received worse clinical care than MA beneficiaries living in urban areas for 22 of 44 measures, similar care for 20 measures, and better care for just two measures.<sup>2</sup> Deficits for rural residents were largest in the areas of colorectal screening (a 13-percentage-point deficit), medication reconciliation for patients after a hospital discharge (a 12-percentage-point deficit), and avoiding potentially harmful drug-disease interactions in elderly patients with dementia (a 12-percentage-point deficit).

### ***Rural-Urban Disparities in Health Care in Medicare by Racial and Ethnic Group***

The overall pattern of rural and urban residents reporting similar experiences with care generally held across racial and ethnic groups (American Indian or Alaska Native [AI/AN], Asian or Pacific Islander [API], Black, Hispanic, and White) and coverage types (Medicare FFS and MA). One notable exception involved API beneficiaries enrolled in MA. In that group, rural residents reported better experiences with care than urban residents for four of seven measures, similar experiences for two measures, and worse experiences for one measure (see Figure 2).

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<sup>1</sup> Beneficiaries were classified as living in a rural or urban area based on the zip code of their mailing address and the corresponding Census Bureau core-based statistical area (CBSA). CBSAs consist of the county or counties associated with at least one core urban area plus adjacent counties having a high degree of social and economic integration with the core. Metropolitan statistical areas contain a core urban area of 50,000 or more population. Micropolitan statistical areas contain a core urban area of at least 10,000 but less than 50,000 population. For this report, any beneficiary residing within a metropolitan statistical area was classified as an urban resident; any beneficiary living in a micropolitan statistical area or outside of a CBSA was classified as a rural resident.

<sup>2</sup> Here, “similar” is used to characterize differences that are not statistically significant, fall below a magnitude threshold, or both, as described in the Appendix. “Worse” and “better” are used to characterize differences that are statistically significant and exceed a magnitude threshold.

While the pattern of generally worse clinical care in rural than urban areas held for all racial and ethnic groups,<sup>3</sup> the pattern was more consistent for Hispanic beneficiaries than for other groups (see Figure 3). Among API, Black, and White beneficiaries, rural beneficiaries received worse care on about 40 percent of clinical care measures and better care on 5–8 percent of clinical care measures. In contrast, among Hispanic beneficiaries, rural residents received worse care on 70 percent of clinical measures and better care on 11 percent of clinical care measures.

### ***Racial and Ethnic Disparities in Health Care in Medicare Within Urban and Rural Areas***

Patterns of racial and ethnic disparities in patient experience were largely similar for urban and rural residents except for API-White disparities among MA enrollees and Black-White disparities among Medicare FFS enrollees (see Figures 4 and 5). Among urban residents, API MA beneficiaries reported worse experiences of care than White MA beneficiaries on six of seven measures and better care on one measure (annual flu vaccine). Among rural residents, API MA and White MA beneficiaries reported similar care on all patient experience measures. The opposite was true for Black-White disparities among FFS enrollees. Among urban residents, Black FFS and White FFS beneficiaries reported similar care on six of seven patient experience measures and worse care on one measure (annual flu vaccine); among rural residents, Black FFS beneficiaries reported worse experiences of care than White FFS beneficiaries on three of seven measures and similar experiences on four measures.

Regardless of geography or coverage type, AI/AN beneficiaries typically reported worse experiences of care than White beneficiaries. Regardless of geography, API FFS beneficiaries reported worse care than White beneficiaries on about 60 percent of patient experience measures. Regardless of geography, Black MA beneficiaries typically reported care that was similar to the care reported by White MA beneficiaries. Regardless of geography or coverage type, Hispanic beneficiaries typically reported care that was similar to the care reported by White beneficiaries.

Patterns of racial and ethnic differences in clinical care were similar in urban vs. rural areas for API and Black beneficiaries but not for Hispanic beneficiaries (see Figure 6). Regardless of geography, API beneficiaries received worse care than White beneficiaries on about one-tenth of the clinical care measures and better care on about a third of the clinical care measures. Regardless of geography, Black beneficiaries received worse care than White beneficiaries on about half of the clinical care measures and better care on about one-tenth of the clinical care measures. In urban areas, Hispanic beneficiaries received worse care than White beneficiaries on 27 percent of the clinical care measures and better care on 18 percent of the clinical care measures. In rural areas, Hispanic beneficiaries received worse care than White beneficiaries on 57 percent of the clinical care measures and better care on 18 percent of the clinical care measures.

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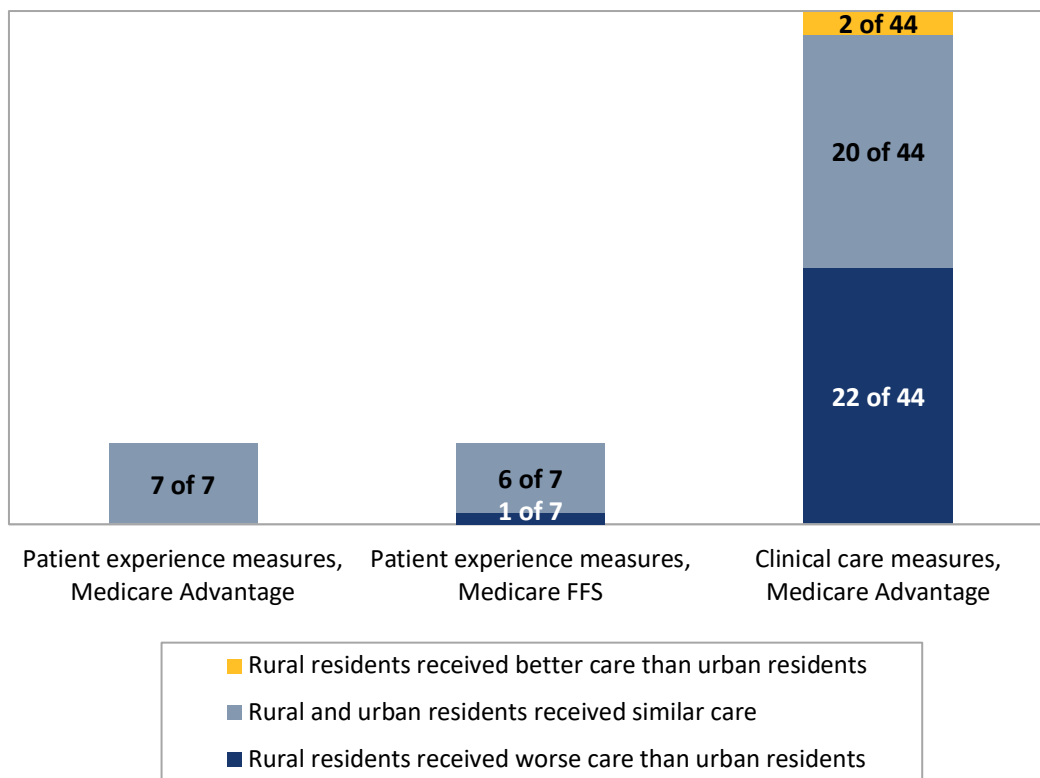
<sup>3</sup> For reporting clinical care (HEDIS) data stratified by race and ethnicity, racial and ethnic group membership is estimated using a methodology that combines information from CMS administrative data, surname, and residential location. Estimates of membership in AI/AN group are less accurate than for other racial and ethnic groups; thus, this report does not show scores for AI/AN beneficiaries on the clinical care measures.

***Conclusion***

In evaluating rural-urban differences in the quality of health care received in 2018 by Medicare beneficiaries at the national level, this report found that rural residents, regardless of race or ethnicity, often received worse clinical care than urban residents. Future research is needed to understand whether this pattern reflects poorer dissemination of clinical practice guidelines to rural areas, poorer translation of those guidelines into clinical practice, difficulty accessing care in rural areas, or some other cause. The difference between rural and urban residents in quality of clinical care received was most pronounced among Hispanic beneficiaries. Rural-urban differences in experiences of care were much more limited, both overall and for each racial and ethnic group. Finally, this analysis revealed notable variation in Hispanic-White disparities in clinical care by geography. Specifically, whereas Hispanic beneficiaries generally received worse clinical care than White beneficiaries received, the difference between these groups was evident far more often in rural areas than in urban areas. The results suggest that quality improvement efforts should focus on improving clinical care for all rural residents and put special emphasis on addressing the clinical care needs of rural Hispanics.

## Figure 1. Rural-Urban Disparities in Care: All Patient Experience and Clinical Care Measures

Number of patient experience measures and clinical care measures for which rural residents received care that was worse than, similar to, or better than the care received by urban residents in 2018

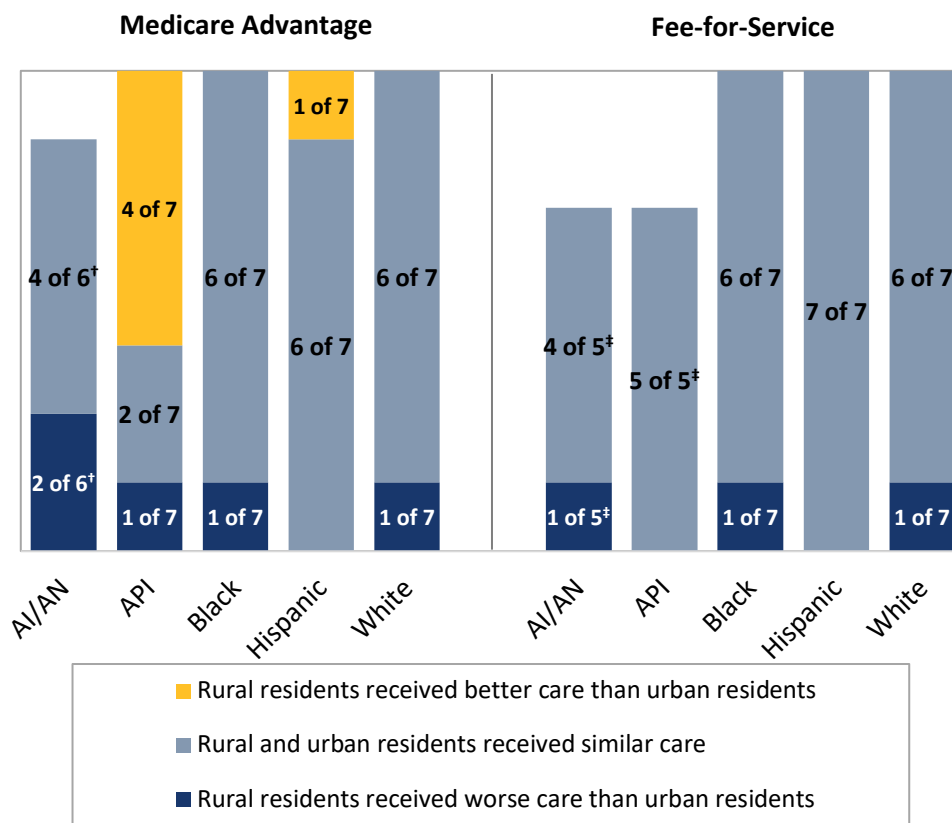


**SOURCES:** The bar on the left summarizes patient experience data from all MA beneficiaries nationwide who participated in the 2018 Medicare CAHPS survey. The bar in the middle summarizes patient experience data from all Medicare FFS beneficiaries nationwide who participated in the 2018 Medicare CAHPS survey. The bar on the right summarizes clinical quality (HEDIS) data collected in 2018 from MA plans nationwide.



## Figure 2. Rural-Urban Disparities in Care by Racial and Ethnic Group: All Patient Experience Measures

Number of patient experience measures for which rural Black, Hispanic, and White beneficiaries reported experiences that were worse than, similar to, or better than the experiences reported by urban Black, Hispanic, and White beneficiaries in 2018



**SOURCE:** This chart summarizes data from all Medicare FFS and MA beneficiaries nationwide who participated in the 2018 Medicare CAHPS survey.

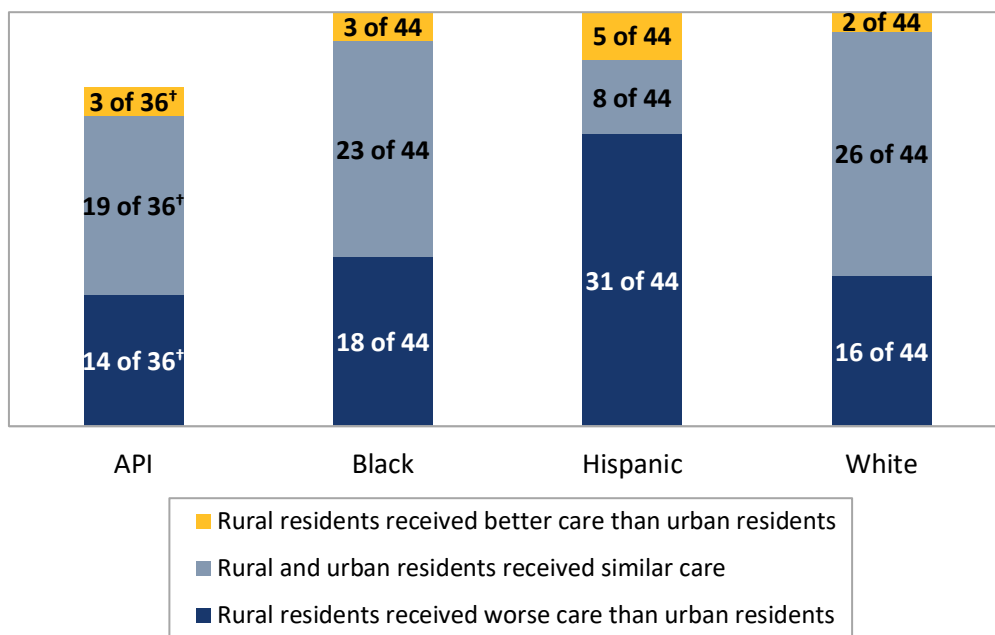
**NOTES:** AI/AN = American Indian or Alaska Native. API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of race.

<sup>†</sup> There were not enough data from rural MA AI/AN beneficiaries to make a rural-urban comparison on one patient experience measure.

<sup>‡</sup> There were not enough data from rural and urban FFS AI/AN beneficiaries or from rural API beneficiaries to make rural-urban comparisons for these groups on two patient experience measures.

### Figure 3. Rural-Urban Disparities in Care by Racial and Ethnic Group: All Clinical Care Measures

Number of clinical care measures for which rural Asian and Pacific Islander (API), Black, Hispanic, and White MA beneficiaries experienced care that was worse than, similar to, or better than the care experienced by urban API, Black, Hispanic, and White MA beneficiaries in 2018



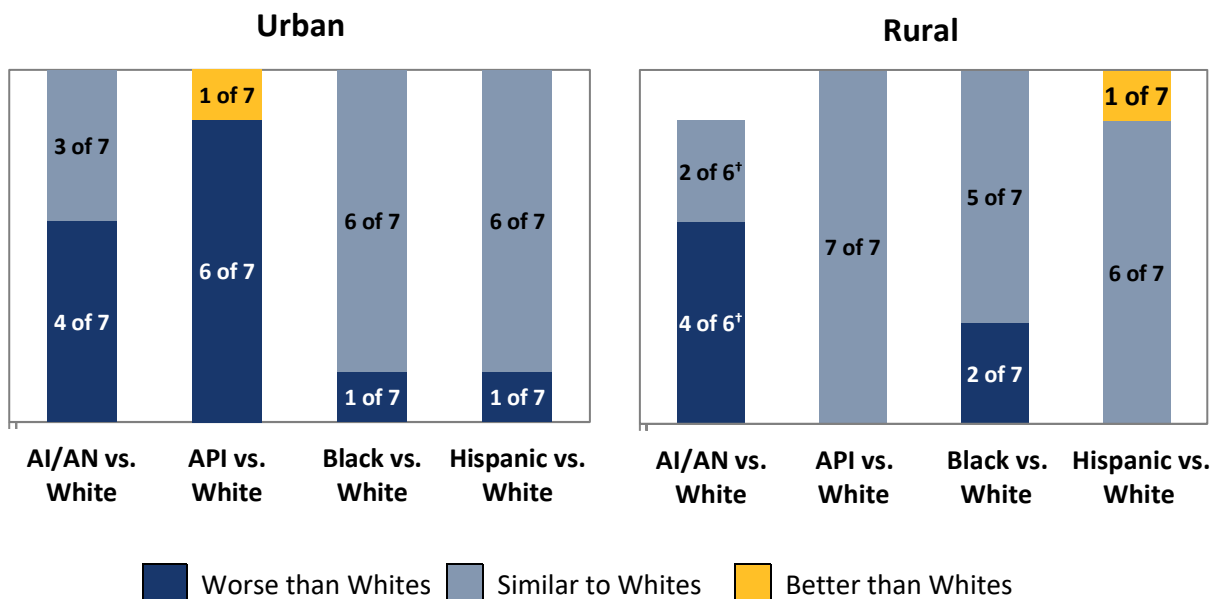
**SOURCE:** This chart summarizes clinical quality (HEDIS) data collected in 2018 from MA plans nationwide.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of race.

<sup>†</sup> There were only enough data from API beneficiaries to make rural-urban comparisons on 36 of the 44 clinical care measures.

## Figure 4. Racial and Ethnic Disparities in Care Within Urban and Rural Areas: All Patient Experience Measures, Medicare Advantage

Number of patient experience measures for which urban and rural residents of selected racial and ethnic minority groups reported experiences that were worse than, similar to, or better than the experiences reported by White urban and rural residents in 2018



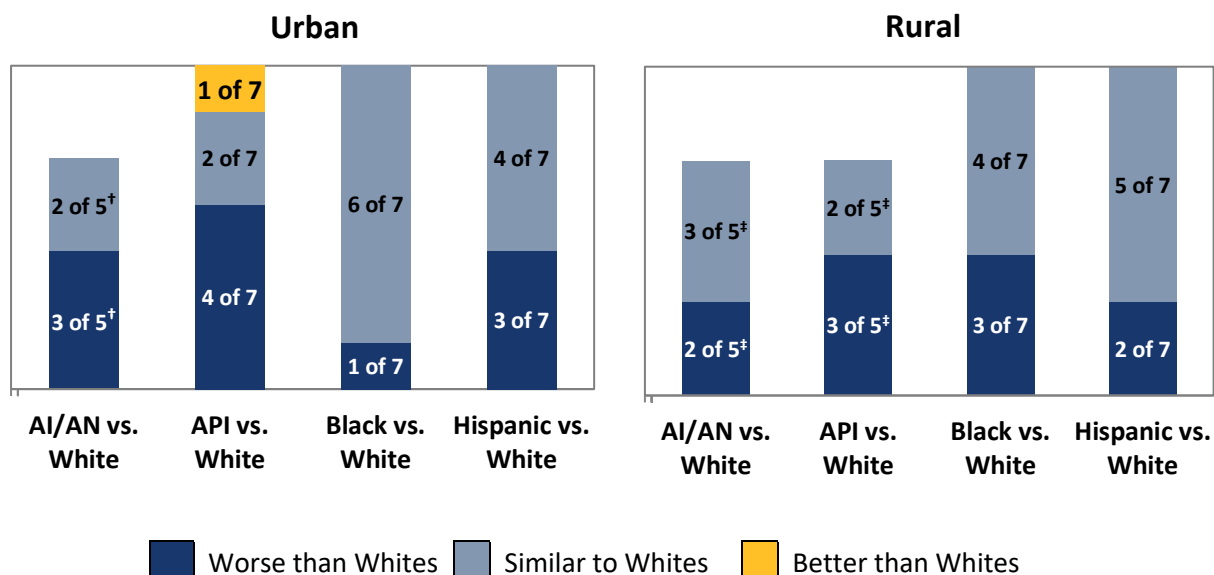
**SOURCE:** Data from the 2018 Medicare CAHPS survey.

**NOTES:** AI/AN = American Indian or Alaska Native. API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of race.

<sup>†</sup> For one patient experience measure, there were not enough data from rural MA AI/AN beneficiaries to compare their experiences to those of rural MA White beneficiaries.

## Figure 5. Racial and Ethnic Disparities in Care Within Urban and Rural Areas: All Patient Experience Measures, Fee-for-Service

Number of patient experience measures for which urban and rural residents of selected racial and ethnic minority groups reported experiences that were worse than, similar to, or better than the experiences reported by White urban and rural residents in 2018



**SOURCE:** Data from the 2018 Medicare CAHPS survey.

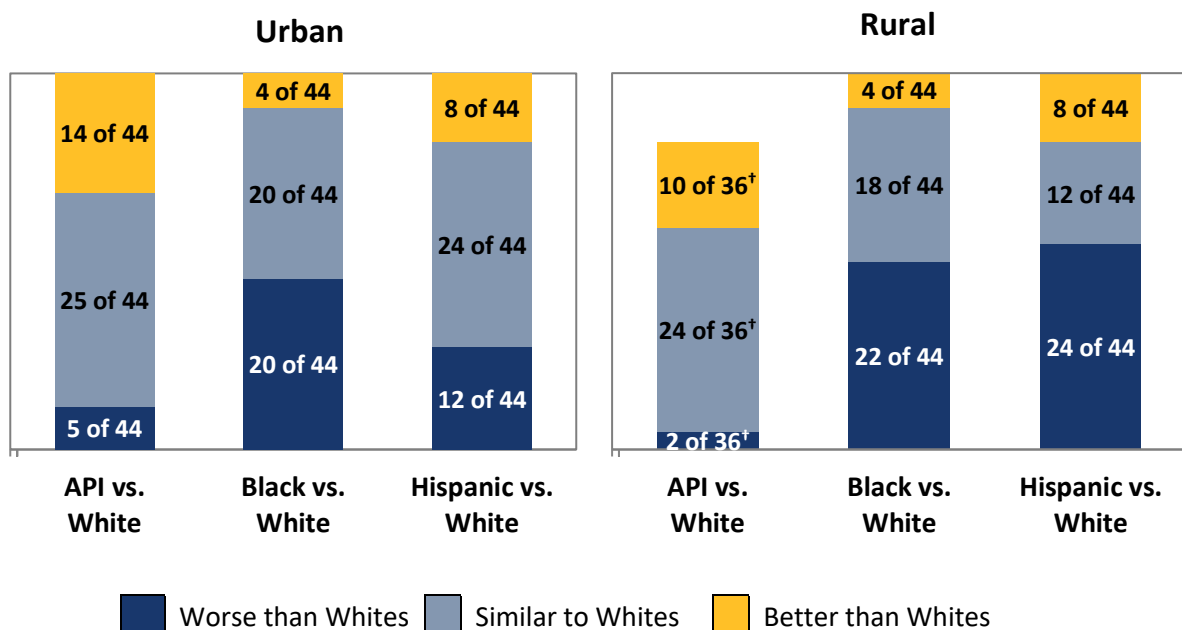
**NOTES:** AI/AN = American Indian or Alaska Native. API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of race.

<sup>†</sup> For two patient experience measures, there were not enough data from urban FFS AI/AN beneficiaries to compare their experiences to those of urban FFS White beneficiaries.

<sup>‡</sup> For two patient experience measures, there were not enough data from rural FFS AI/AN beneficiaries or from rural FFS API beneficiaries to compare their experiences to those of rural FFS White beneficiaries.

## Figure 6. Racial and Ethnic Disparities in Care Within Urban and Rural Areas: All Clinical Care Measures

Number of clinical care measures for which urban and rural residents of selected racial and ethnic minority groups experienced care that was worse than, similar to, or better than the care experienced by White urban and rural residents in 2018



**SOURCE:** This chart summarizes clinical quality (HEDIS) data collected in 2018 from MA plans nationwide.

**NOTES:** AI/AN = American Indian or Alaska Native. API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of race.

<sup>†</sup> There were only enough data from rural API beneficiaries to make rural-urban comparisons on 36 of the 44 clinical care measures.



## Patient Experience and Clinical Care Measures Included in This Report

### Patient Experience Measures

- Getting needed care
- Getting appointments and care quickly
- Customer service
- Doctors who communicate well
- Care coordination
- Getting needed prescription drugs
- Annual flu vaccine

### Clinical Care Measures

#### Prevention and Screening

- Adult body mass index (BMI) assessment
- Breast cancer screening
- Colorectal cancer screening

#### Respiratory Conditions

- Testing to confirm chronic obstructive pulmonary disease (COPD)
- Pharmacotherapy management of COPD exacerbation—systemic corticosteroid
- Pharmacotherapy management of COPD exacerbation—bronchodilator

#### Cardiovascular Conditions

- Controlling high blood pressure
- Persistence of beta-blocker treatment
- Statin use in patients with cardiovascular disease
- Medication adherence for cardiovascular disease—statins

#### Diabetes

- Diabetes care—blood sugar testing
- Diabetes care—eye exam
- Diabetes care—kidney disease monitoring
- Diabetes care—blood pressure controlled
- Diabetes care—blood sugar controlled
- Statin use in patients with diabetes
- Medication adherence for diabetes—statins

#### Musculoskeletal Conditions

- Rheumatoid arthritis management
- Osteoporosis management in women who had a fracture

#### Behavioral Health

- Antidepressant medication management—acute phase treatment
- Antidepressant medication management—continuation phase treatment
- Follow-up after hospital stay for mental illness (within seven days of discharge)
- Follow-up after hospital stay for mental illness (within 30 days of discharge)
- Follow-up after emergency department (ED) visit for mental illness (within seven days of discharge)
- Follow-up after ED visit for mental illness (within 30 days of discharge)
- Follow-up after ED visit for alcohol and other drug abuse or dependence (within 7 days of discharge)
- Follow-up after ED visit for alcohol and Other Drug abuse or dependence (within 30 days of discharge)
- Initiation of Alcohol and Other Drug dependence treatment
- Engagement of Alcohol and Other Drug dependence treatment

#### Medication Management and Care Coordination

- Medication reconciliation after hospital discharge
- Transitions of care—notification of inpatient admission
- Transitions of care—receipt of discharge information
- Transitions of care—patient engagement after inpatient discharge
- Transitions of care—medication reconciliation after inpatient discharge
- Follow-up after ed visit for people with high-risk multiple chronic conditions

## **Patient Experience and Clinical Care Measures Included in This Report (cont.)**

### **Clinical Care Measures**

#### **Overuse/Appropriate Use**

- Avoiding potentially harmful drug-disease interactions in elderly patients with chronic renal failure
- Avoiding potentially harmful drug-disease interactions in elderly patients with dementia
- Avoiding potentially harmful drug-disease interactions in elderly patients with a history of falls
- Avoiding use of high-risk medications in the elderly
- Avoiding use of opioids at high dosage
- Avoiding use of opioids from multiple prescribers
- Avoiding use of opioids from multiple pharmacies
- Avoiding use of opioids from multiple prescribers and pharmacies

#### **Access/Availability of Care**

- Older adults' access to preventive/ambulatory services



# Overview, Methods, and Summary of Results



## **Overview**

This report presents summary information on the quality of health care received in 2018 by Medicare beneficiaries nationwide. A previous version of this report presented information on the quality of health care received in 2017 by Medicare beneficiaries nationwide. Two types of quality of care data are included: (1) measures of patient experience, which describe how well the care patients receive meets their needs for such things as timely appointments, respectful care, clear communication, and access to information; and (2) measures of clinical care, which describe the extent to which patients receive appropriate screening and treatment for specific health conditions. Patient experience data are presented for beneficiaries enrolled in Medicare fee-for-service (FFS) as well as those enrolled in managed care (Medicare Advantage [MA]) plans; clinical data are presented only for beneficiaries enrolled in MA plans.

The Institute of Medicine (IOM, now the National Academy of Medicine) has identified the equitable delivery of care as a hallmark of quality (IOM, 2001). Assessing equity of care delivery requires making comparisons of quality by patient characteristics such as urban or rural residence, race, and ethnicity. Prior studies have found higher rates of chronic illness and poorer overall health in rural communities compared with urban populations. One possible source of these differences in morbidity is disparate experiences with health care and differences in access to high-quality care between rural and urban areas (Meit et al., 2014). There is also evidence that the health care disadvantages faced by those living in rural areas are sometimes greater for racial and ethnic minorities compared with non-Hispanic Whites, and that racial and ethnic disparities are sometimes greater in rural than in urban areas. This may be because living in a rural area exacerbates exposure to unequal social conditions that foster disparities in health care (Caldwell et al., 2016). Given these prior findings, three sets of comparisons are presented in this report. In the first set, quality of care for rural residents is compared with quality of care for urban residents. In the second, quality of care for rural residents is compared with quality of care for urban residents of the same race or ethnicity. In the third, quality of care for racial and ethnic minority groups is compared with quality of care for Whites separately within rural and urban areas. The focus of this report is on differences in quality of care that exist at the national level. Interested readers can find information about health care quality for specific Medicare plans at <https://www.medicare.gov/find-a-plan/questions/home.aspx>.

## **Data Sources**

In all, this report provides data regarding seven patient experience measures and 44 clinical care measures. The set of patient experiences measures presented in this report is the same as the set reported on in the 2018 report. The set of clinical care measures presented in this report differs from the set presented in the 2018 report. Two clinical measures presented in the previous report (Appropriate Monitoring of Patients Taking Long-Term Medications and Asthma Medication Ratio in Older Adults) were discontinued and thus are not presented in this report. Thirteen clinical measures are included in this report that were not included in the 2018 report. The newly included measures consist of four behavioral health measures, five measures about medication management and care coordination, and four measures about overuse of opioids.

Patient experience data were collected from a national survey of Medicare beneficiaries, known as the Medicare Consumer Assessment of Healthcare Providers and Systems (CAHPS) survey. This survey is administered each year to both Medicare FFS and MA beneficiaries. The data in this report are from the 2018 Medicare CAHPS survey. Examples of patient experience measures include how easy it is to get needed care, how well doctors communicate with beneficiaries, and how easy it is for beneficiaries to get information from their drug plans about prescription drug coverage and cost.

Clinical care data were gathered through medical records and insurance claims for hospitalizations, medical office visits, and procedures. These data, which are collected each year from MA plans nationwide, are part of the Healthcare Effectiveness Data and Information Set (HEDIS). HEDIS data are not available for FFS beneficiaries. In this report, clinical care measures are grouped into nine categories: prevention and screening, respiratory conditions, cardiovascular conditions, diabetes, musculoskeletal conditions, behavioral health, medication management and care coordination, overuse/appropriateness, and access/availability of care. Although the annual flu vaccination measure is considered a HEDIS measure, the measure is included on the Medicare CAHPS survey and so is included with the patient experience measures in this report. The HEDIS data reported here were collected in 2018. Whereas all patient experience measures are applicable to beneficiaries aged 18 years and older, certain HEDIS measures apply to beneficiaries in a more limited age range, as noted throughout the report.

Beneficiaries were classified as living in a rural or urban area based on the zip code of their mailing address and the corresponding Census Bureau core-based statistical area (CBSA). CBSAs consist of the county or counties or equivalent entities associated with at least one core urban area plus adjacent counties having a high degree of social and economic integration with the core as measured through commuting ties with the counties that make up the core. Metropolitan statistical areas contain a core urban area of 50,000 or more population. Micropolitan statistical areas contain a core urban area of at least 10,000 but less than 50,000 population. For this report, any beneficiary residing within a metropolitan statistical area was classified as an urban resident; any beneficiary living in a micropolitan statistical area or outside of a CBSA was classified as a rural resident. This definition differs from the one used in the 2018 report. In that report, beneficiaries living either in a metropolitan statistical area or in a micropolitan statistical areas were classified as urban residents. This change in definition increased the proportion of beneficiaries classified as rural residents and thus allowed for reporting on more racial and ethnic groups in Sections II and III of the report (see below). Because of this change in definition, results presented in the 2018 report are not directly comparable to the results presented in this report. By the definition used in this report, 15.1 percent (approximately 2.5 million) of MA beneficiaries and 21.5 percent (approximately 7.8 million) of FFS beneficiaries were rural residents in 2018. Of all Medicare beneficiaries residing in rural areas in 2018, 24.5 percent were enrolled in MA; of beneficiaries residing in urban areas, 33.3 percent were enrolled in MA.

### ***Reportability of Information***

Sample size criteria were used to determine whether a score on a measure was reportable for a particular group. Scores based on 400 or more observations were considered sufficiently precise for reporting unflagged. Scores based on more than 99 but fewer than 400 observations were considered low in precision and were flagged as such. In this report, flagged scores—which should be regarded as tentative information—are shown unbolded with a superscript symbol appended; the symbol links to a note at the bottom of the chart that cautions about the precision of the score. Scores based on 99 or fewer observations are suppressed (i.e., not reported). When a score is suppressed for a particular group, a note appears at the bottom of the relevant chart saying that there were not enough data from that group to make a rural-urban or racial/ethnic comparison on the measure.

### ***Rural-Urban Disparities in Health Care in Medicare***

Section I of the report begins with a stacked bar chart showing the number of patient experience measures (out of seven) and the number of clinical care measures (out of 44) for which rural residents reported experiences of care that were worse than, similar to, or better than the experiences reported



by urban residents.<sup>1</sup> In this chart, information on patient experience is presented separately for Medicare FFS and MA beneficiaries. Following the stacked bar chart are separate, unstacked bar charts for each patient experience and clinical care measure. Charts for patient experience measures show the average score for rural and urban FFS and MA beneficiaries on a 0–100 scale. The average score represents the percentage of the best possible score for a given group for that measure. For example, consider a measure for which the best possible score is 4 and the worst possible score is 1. If a given group's score on that measure is 3.5, then that group's score on a 0–100 scale is  $([3.5-1]/[4-1]) \times 100 = 83.3$ . Charts for clinical care measures show the percentage of rural and urban MA beneficiaries whose care met the standard called for by the specific measure (e.g., receiving a clinically indicated test or treatment).

### ***Rural-Urban Disparities in Health Care in Medicare by Racial and Ethnic Group***

Section II of the report shows how rural-urban gaps in health care vary from one racial or ethnic group to another. Section II begins with a set of stacked bar charts that show, separately for American Indian or Alaska Native (AI/AN), Asian or Pacific Islander (API), Black, Hispanic, and White Medicare FFS and MA beneficiaries, the number of patient experience measures for which rural residents reported experiences of care that were worse than, similar to, or better than the experiences reported by urban residents. There was enough information from Black, Hispanic, and White FFS and MA beneficiaries, and from API MA beneficiaries, to compare rural and urban residents on all seven measures. Rural-urban comparisons among AI/AN MA beneficiaries were possible for six measures. Rural-urban comparisons among AI/AN and API FFS beneficiaries were possible for five measures. Following these stacked bar charts are separate, unstacked bar charts for each patient experience measure. These charts show, separately for AI/AN, API, Black, Hispanic, and White FFS and MA beneficiaries, the average score for rural and urban residents on a 0–100 scale. After the patient experience measures, Section II presents a set of stacked bar charts that show, separately for API, Black, Hispanic, and White MA beneficiaries, the number of clinical care measures for which rural residents reported experiences of care that were worse than, similar to, or better than the experiences reported by urban residents. There was enough information from Black, Hispanic, and White beneficiaries to compare rural and urban residents on all 44 clinical care measures. Rural-urban comparisons among API beneficiaries were possible for 36 clinical care measures. Following the stacked bar charts are separate, unstacked bar charts for each clinical care measure that show, separately for API (where available), Black, Hispanic, and White MA beneficiaries, the percentage of rural and urban residents whose care met the standard called for by the measure.

### ***Racial and Ethnic Disparities in Health Care in Medicare Within Urban and Rural Areas***

Section III of the report begins with four stacked bar charts that show, separately for rural and urban Medicare FFS and MA beneficiaries, the number of patient experience measures for which members of each racial and ethnic minority group reported experiences of care that were worse than, similar to, or better than the experiences reported by Whites. There was enough information from rural and urban MA and FFS beneficiaries to compare Blacks and Hispanics to Whites on all seven measures. There was also enough information from urban AI/AN MA beneficiaries, urban API MA beneficiaries, rural API MA beneficiaries, and urban API FFS beneficiaries to compare them to Whites on all seven measures. There was only enough information from rural AI/AN MA beneficiaries to compare them to Whites on six measures. There was only enough information from urban AI/AN FFS beneficiaries, rural AI/AN FFS beneficiaries, and rural API FFS beneficiaries to compare them to Whites on five measures. Following

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<sup>1</sup> Here, “similar” is used to characterize differences that are not statistically significant, fall below a magnitude threshold, or both, as described in the Appendix. “Worse” and “better” are used to characterize differences that are statistically significant and exceed a magnitude threshold.

these stacked bar charts are separate, unstacked bar charts for each patient experience measure. These charts show, separately for rural and urban MA and FFS beneficiaries, the average score for each racial and ethnic group on a 0–100 scale. After the patient experience measures, Section III presents a pair of stacked bar charts that show, separately for rural and urban MA beneficiaries, the number of clinical care measures for which members of each racial and ethnic minority group experienced care that was worse than, similar to, or better than the care experienced by Whites. There was enough information from rural and urban Black and Hispanic beneficiaries and from urban API beneficiaries to compare them to Whites on all 44 measures. Rural API-White comparisons were possible for 36 measures. Following these stacked bar charts are separate, unstacked bar charts for each clinical care measure that show, separately for rural and urban MA beneficiaries, the percentage of beneficiaries in each racial and ethnic group whose care met the standard called for by the specific measure.

For detailed information on data sources and analytic methods, see the Appendix.

### ***Summary of Results and Conclusions***

Rural residents, regardless of race or ethnicity, often received worse clinical care than urban residents in 2018. Although patient experience scores are adjusted for a broad set of case-mix variables (see the Appendix), clinical care scores are not. It is therefore possible that the differences observed between rural and urban residents in the quality of clinical care are attributable to factors that are not accounted for in the analysis. Future research is needed to understand whether this pattern reflects poorer dissemination of clinical practice guidelines to rural areas, poorer translation of those guidelines into clinical practice, or some other cause. Findings from that research would be useful for informing efforts to address these disparities. The difference between rural and urban residents in quality of clinical care received was most pronounced among Hispanic beneficiaries. Future research is therefore also needed to determine why rural Hispanics are at especially high risk for poor clinical care. Rural-urban differences in experiences of care were much more limited, both overall and for each racial and ethnic group. Finally, Hispanic-White disparities in clinical care varied greatly by geography: whereas Hispanic beneficiaries generally received worse clinical care than White beneficiaries received, the difference between these groups was evident far more often in rural areas than in urban areas. The results suggest that quality improvement efforts should focus on improving clinical care for all rural residents and put special emphasis on addressing the clinical care needs of rural Hispanics.

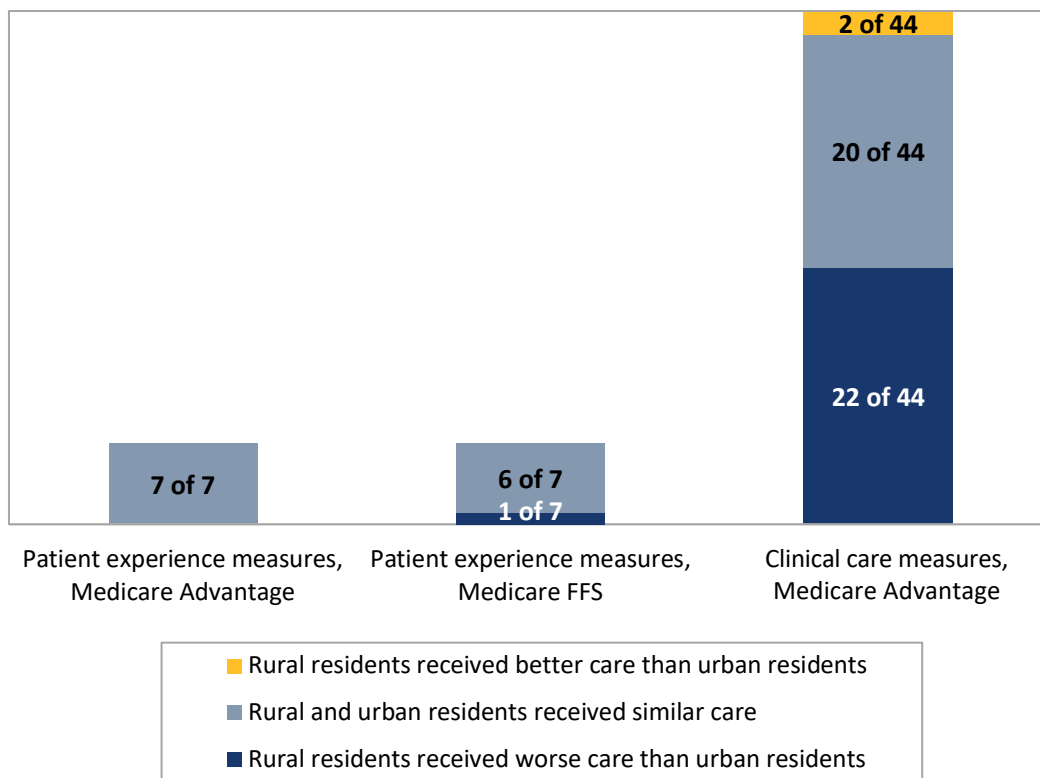


## Section I: Rural Urban Disparities in Health Care in Medicare



## Rural-Urban Disparities in Care: All Patient Experience and Clinical Care Measures

**Number of patient experience measures and clinical care measures for which rural residents received care that was worse than, similar to, or better than the care received by urban residents in 2018**



**SOURCE:** The bar on the left summarizes patient experience data from all MA beneficiaries nationwide who participated in the 2018 Medicare CAHPS survey. The bar in the middle summarizes patient experience data from all Medicare FFS beneficiaries nationwide who participated in the 2018 Medicare CAHPS survey. The bar on the right summarizes clinical quality (HEDIS) data collected in 2018 from MA plans nationwide.

The relative difference between rural and urban is used to assess disparities.

- **Better** = Rural residents received better care than urban residents. Differences are statistically significant ( $p < 0.05$ ), are equal to or larger than 3 points<sup>†</sup> on a 0–100 scale, and favor rural residents.
- **Similar** = Rural and urban residents received care of similar quality. Differences are less than 3 points on a 0–100 scale (differences greater than 3 points were always statistically significant). Differences may be statistically significant.
- **Worse** = Rural residents received worse care than urban residents. Differences are statistically significant, are equal to or larger than 3 points on a 0–100 scale, and favor urban residents.

<sup>†</sup> A difference that is considered to be of moderate magnitude. C. A. Paddison, M. N. Elliott, A. M. Haviland, D. O. Farley, G. Lyratzopoulos, K. Hambarsoomian, J. W. Dembosky, and M. O. Roland, “Experiences of Care Among Medicare Beneficiaries with ESRD: Medicare Consumer Assessment of Healthcare Providers and Systems (CAHPS) Survey Results,” *American Journal of Kidney Diseases*, Vol. 61, No. 3, 2013, pp. 440–449.

**Rural residents received worse care than urban residents**

- Annual flu vaccination (in FFS Medicare only)
- Adult body mass index assessment
- Colorectal cancer screening
- Testing to confirm COPD
- Pharmacotherapy management of COPD exacerbation—use of systemic corticosteroid
- Pharmacotherapy management of COPD exacerbation—use of bronchodilators
- Medication adherence for cardiovascular disease—statins
- Diabetes care—eye exam
- Diabetes care—blood pressure controlled
- Diabetes care—blood sugar controlled
- Statin use in patients with diabetes
- Medication adherence for diabetes—statins
- Osteoporosis management in women who had a fracture
- Antidepressant medication management—acute phase treatment
- Antidepressant medication management—continuation phase treatment
- Follow-up after emergency department visit for mental illness (within seven days of discharge)
- Initiation of alcohol and other drug dependence treatment
- Medication reconciliation after hospital discharge
- Transitions of care—medication reconciliation after inpatient discharge
- Follow-up after emergency department visit for people with high-risk multiple chronic conditions
- Avoiding potentially harmful drug-disease interactions in elderly patients with chronic renal failure
- Avoiding potentially harmful drug-disease interactions in elderly patients with dementia
- Avoiding potentially harmful drug-disease interactions in elderly patients with a history of falls

**Rural residents received better care than urban residents**

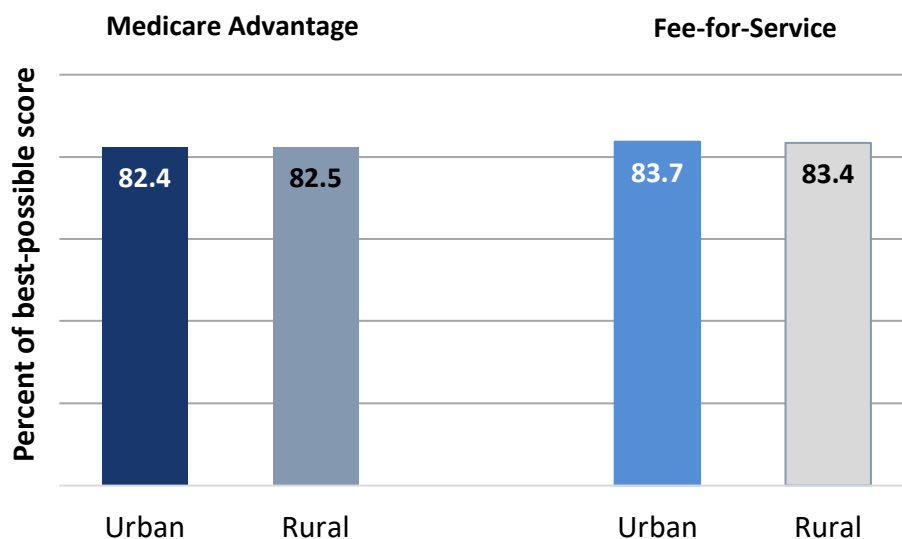
- Follow-up after hospital stay for mental illness (within 30 days of discharge)
- Avoiding use of opioids from multiple prescribers



## Patient Experience

### Patient Experience: Getting Needed Care

Percentage of the best possible score (on a 0–100 scale) earned on how easy it is for patients to get needed care,<sup>†</sup> by geography within coverage type, 2018



**SOURCE:** Data from the Medicare CAHPS survey, 2018.

### Disparities

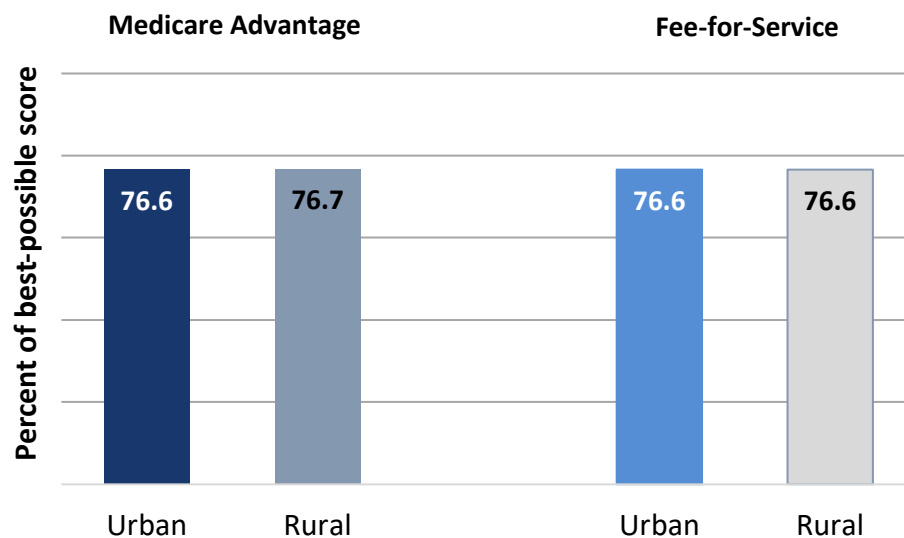
- Among both MA and FFS beneficiaries, rural and urban residents reported similar experiences with getting needed care.

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<sup>†</sup> This includes how often in the last six months patients got appointments with specialists as soon as they needed them and how easy it was to get needed care, tests, or treatment.

## Patient Experience: Getting Appointments and Care Quickly

Percentage of the best possible score (on a 0–100 scale) earned on how quickly patients get appointments and care,<sup>†</sup> by geography within coverage type, 2018



**SOURCE:** Data from the Medicare CAHPS survey, 2018.

### Disparities

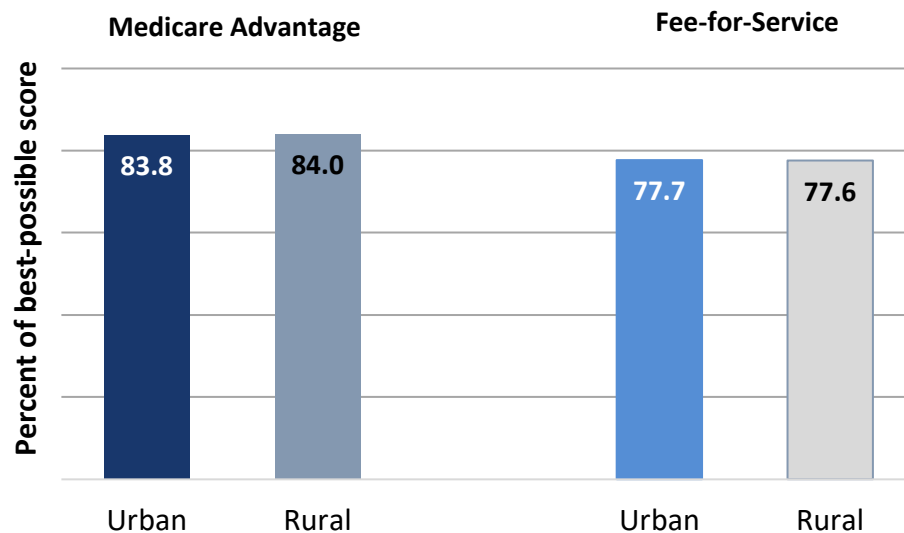
- Among both MA and FFS beneficiaries, rural and urban residents reported similar experiences with getting appointments and care quickly.

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<sup>†</sup> This includes how often in the last six months patients got care that was needed right away, as well as how easy it was to get appointments for checkups and routine care.

## Patient Experience: Customer Service

Percentage of the best possible score (on a 0–100 scale) earned on three aspects of customer service,<sup>†</sup> by geography within coverage type, 2018



**SOURCE:** Data from the Medicare CAHPS survey, 2018.

### Disparities

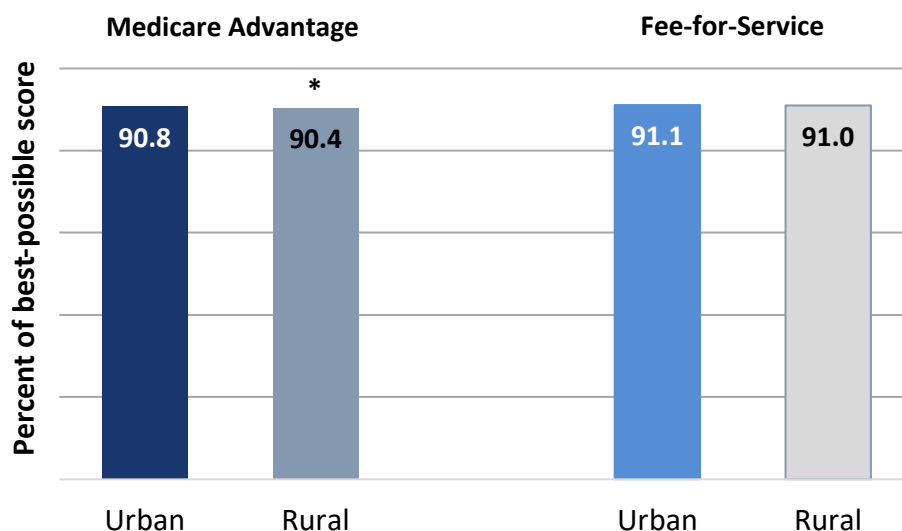
- Among both MA and FFS beneficiaries, rural and urban residents reported similar experiences with customer service.

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<sup>†</sup> This includes how often in the last six months health plan customer service staff provided the information or the help that beneficiaries needed, how often beneficiaries were treated with courtesy and respect, and how often forms from the health plan were easy to fill out.

## Patient Experience: Doctors Who Communicate Well

Percentage of the best possible score (on a 0–100 scale) earned on how well doctors communicate with patients,<sup>†</sup> by geography within coverage type, 2018



**SOURCE:** Data from the Medicare CAHPS survey, 2018.

### Disparities

- Among MA beneficiaries, rural residents reported worse<sup>‡</sup> experiences with doctor communication than urban residents reported. The difference between rural and urban residents was less than 3 points on a 0–100 scale.
- Among FFS beneficiaries, rural residents reported experiences with doctor communication that were similar to the experiences reported by urban residents.

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\* Significantly different from the score for urban residents ( $p < 0.05$ ).

For differences that are statistically significant, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

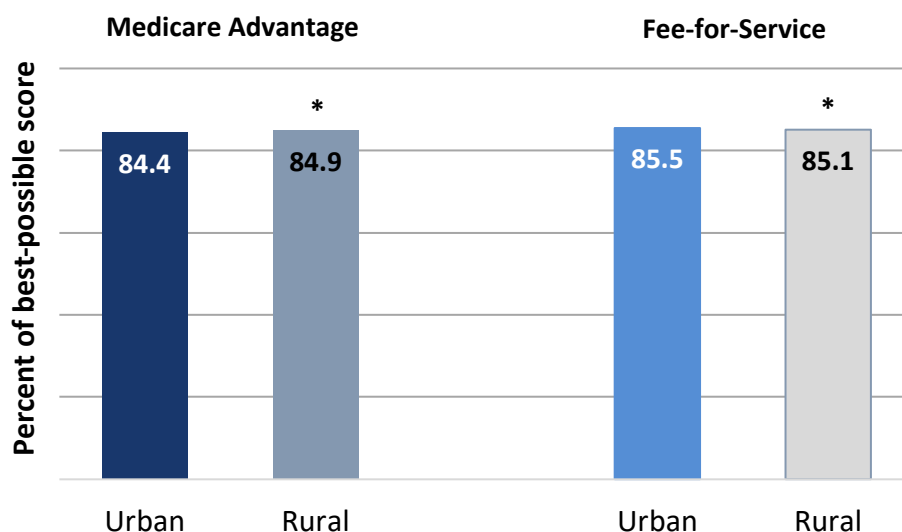
(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

<sup>†</sup> This includes how often in the last six months doctors explained things in a way that was easy to understand, listened carefully, showed respect for what patients had to say, and spent time with patients.

<sup>‡</sup> Unlike on pages 4–5, we use the terms “better” or “worse” to describe all statistically significant differences on individual patient experience measures. We note in the “Disparities” section for each of these measures where differences are greater or less than 3 points.

## Patient Experience: Care Coordination

Percentage of the best possible score (on a 0–100 scale) earned on how well patient care is coordinated,<sup>†</sup> by geography within coverage type, 2018



**SOURCE:** Data from the Medicare CAHPS survey, 2018.

### Disparities

- Among MA beneficiaries, rural residents reported better experiences with care coordination than urban residents reported. The difference between rural and urban residents was less than 3 points on a 0–100 scale.
- Among FFS beneficiaries, rural residents reported worse experiences with care coordination than urban residents reported. The difference between rural and urban residents was less than 3 points on a 0–100 scale.

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\* Significantly different from the score for urban residents ( $p < 0.05$ ).

For differences that are statistically significant, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

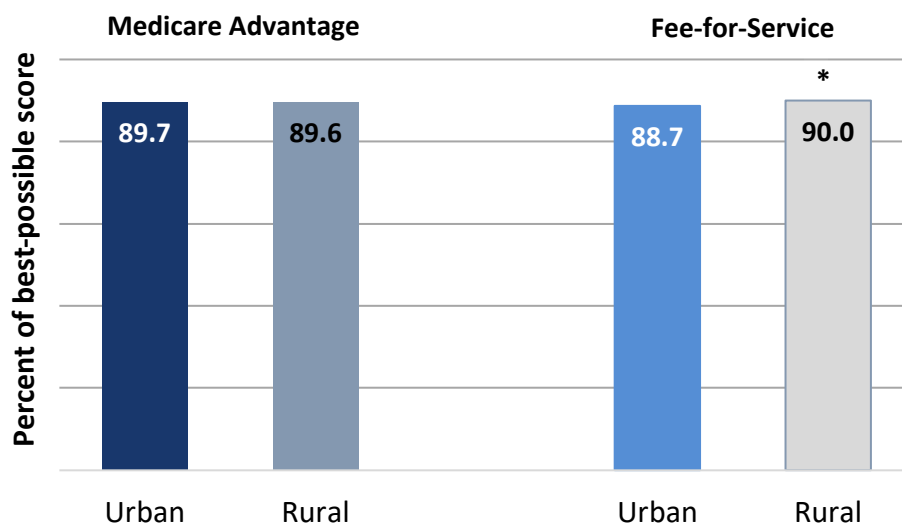
(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

<sup>†</sup> This includes how often in the last six months doctors had medical records and other information about patients' care at patients' scheduled appointments and how quickly patients received their test results.



## Patient Experience: Getting Needed Prescription Drugs

Percentage of the best possible score (on a 0–100 scale) earned on how easy it is for beneficiaries to get the prescription drugs they need using their plans,<sup>†</sup> by geography within coverage type, 2018



SOURCE: Data from the Medicare CAHPS survey, 2018.

### Disparities

- Among MA beneficiaries, rural residents reported experiences with getting needed prescription drugs that were similar to the experiences reported by urban residents.
- Among FFS beneficiaries, rural residents reported better experiences with getting needed prescription drugs than urban residents reported. The difference between rural and urban residents was less than 3 points on a 0–100 scale.

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\* Significantly different from the score for urban residents ( $p < 0.05$ ).

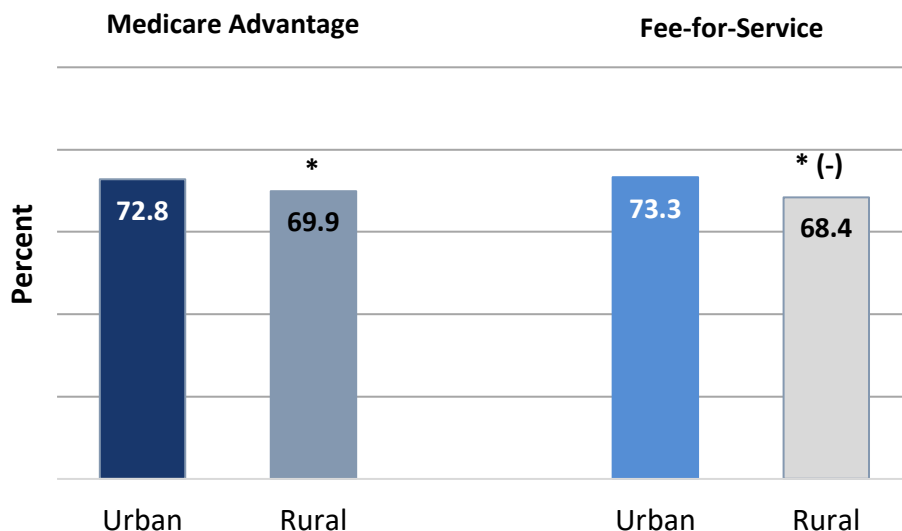
For differences that are statistically significant, the following symbols are also used when applicable:

- (+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.
- (-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

<sup>†</sup> This includes how often in the last six months it was easy to use the plan to get prescribed medications and how easy it was to fill prescriptions at a pharmacy or by mail.

### Patient Experience: Annual Flu Vaccine

Percentage of Medicare enrollees who got a vaccine (flu shot),  
by geography within coverage type, 2018



**SOURCENOTE:** Data from the Medicare CAHPS survey, 2018.

#### Disparities

- Among MA beneficiaries, rural residents were less likely than urban residents to have received the flu vaccine. The difference between rural and urban residents was less than 3 percentage points.
- Among FFS beneficiaries, rural residents were less likely than urban residents to have received the flu vaccine. The difference between rural and urban residents was greater than 3 percentage points.

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\* Significantly different from the score for urban residents ( $p < 0.05$ ).

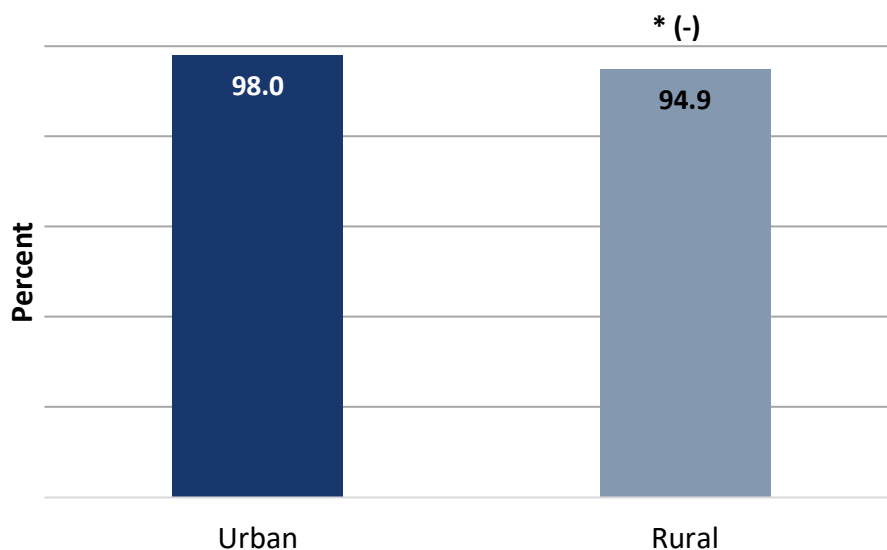
For differences that are statistically significant, the following symbols are also used when applicable:

- (+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.
- (-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

## Clinical Care: Prevention and Screening

### Adult BMI Assessment

Percentage of MA enrollees aged 18 to 74 years who had an outpatient visit whose body mass index (BMI) was documented in the past two years, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

### Disparities

- Rural residents were less likely than urban residents to have had their BMIs documented. The difference between rural and urban residents was greater than 3 percentage points.

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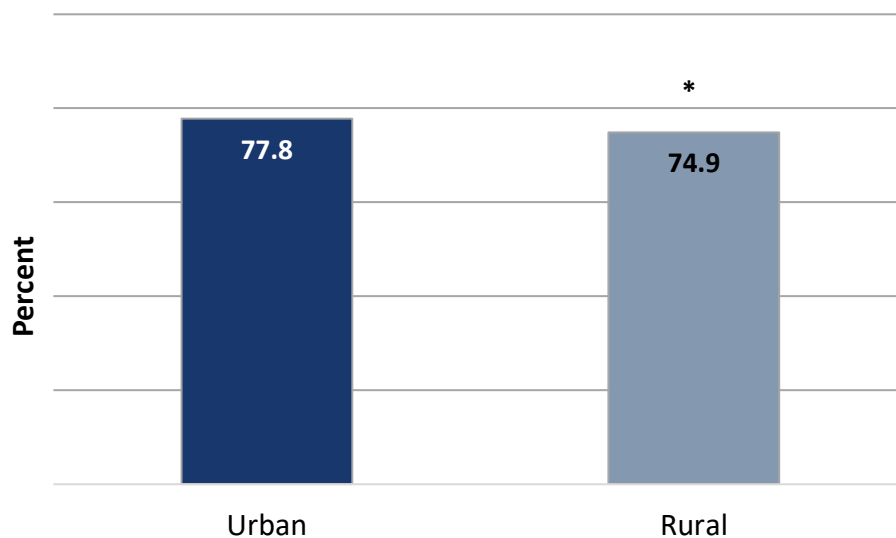
\* Significantly different from the score for urban residents ( $p < 0.05$ ).

For differences that are statistically significant, the following symbols are also used when applicable:

- (+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.
- (-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

## Breast Cancer Screening

Percentage of MA enrollees (women) aged 50 to 74 years who had appropriate screening for breast cancer, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

### Disparities

- Rural women were less likely than urban women to have been appropriately screened for breast cancer, but the difference between rural and urban women was less than 3 percentage points.

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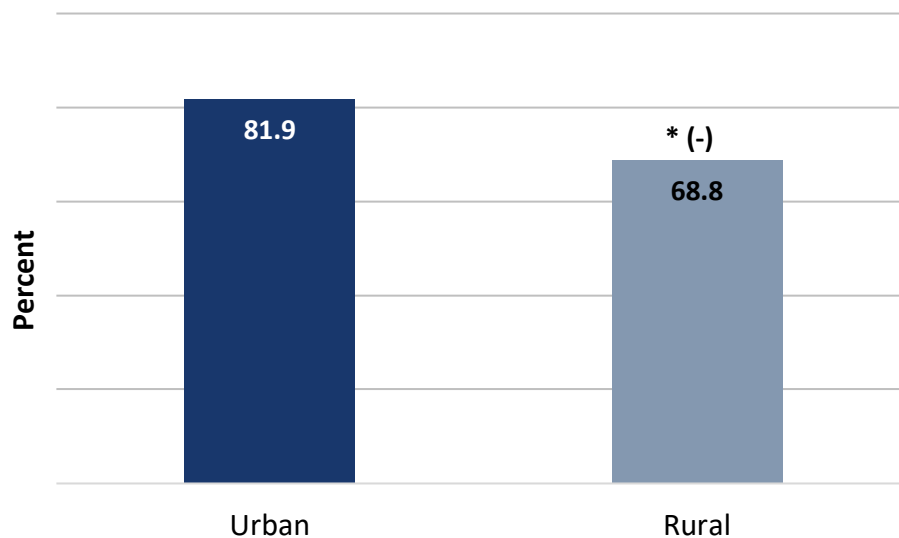
\* Significantly different from the score for urban residents ( $p < 0.05$ ).

For differences that are statistically significant, the following symbols are also used when applicable:

- (+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.
- (-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

## Colorectal Cancer Screening

Percentage of MA enrollees aged 50 to 75 years who had appropriate screening for colorectal cancer, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

### Disparities

- Rural residents were less likely than urban residents to have been appropriately screened for colorectal cancer. The difference between rural and urban residents was greater than 3 percentage points.

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\* Significantly different from the score for urban residents ( $p < 0.05$ ).

For differences that are statistically significant, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

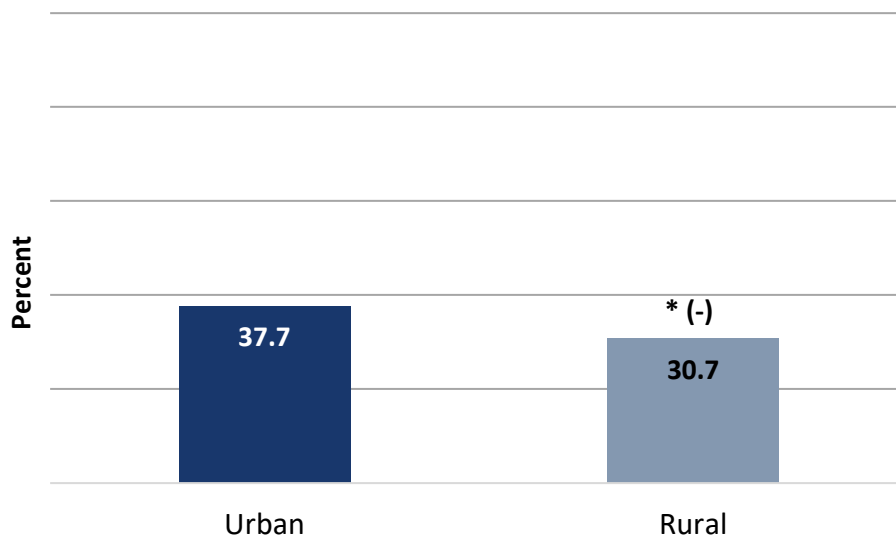
(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.



## Clinical Care: Respiratory Conditions

### Testing to Confirm COPD

Percentage of MA enrollees aged 40 years and older with a new diagnosis of chronic obstructive pulmonary disease (COPD) or newly active COPD who received appropriate spirometry testing to confirm the diagnosis, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

### Disparities

- Rural residents with a new diagnosis of COPD or newly active COPD were less likely than urban residents with a new diagnosis of COPD or newly active COPD to have received a spirometry test to confirm the diagnosis. The difference between rural and urban residents was greater than 3 percentage points.

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\* Significantly different from the score for urban residents ( $p < 0.05$ ).

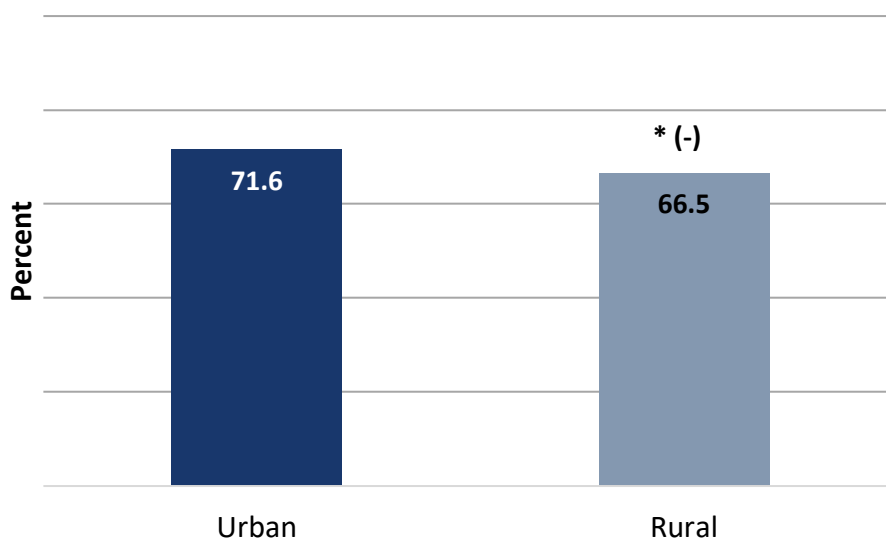
For differences that are statistically significant, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

## Pharmacotherapy Management of COPD Exacerbation— Systemic Corticosteroid

Percentage of MA enrollees aged 40 years and older who had an acute inpatient discharge or emergency department encounter for COPD exacerbation in the past year who were dispensed a systemic corticosteroid within 14 days of the event, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

### Disparities

- Rural residents who experienced a COPD exacerbation were less likely than urban residents who experienced a COPD exacerbation to have been dispensed a systemic corticosteroid within 14 days of the event. The difference between rural and urban residents was greater than 3 percentage points.

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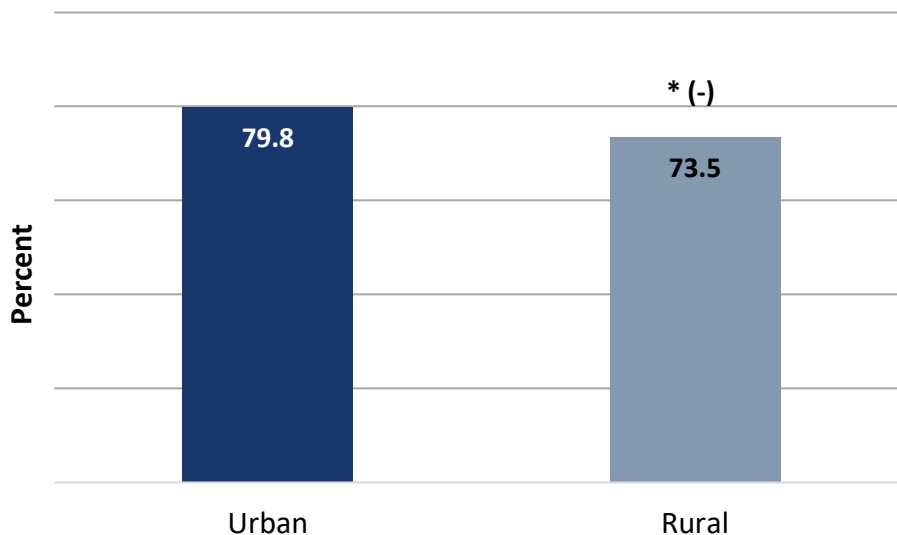
\* Significantly different from the score for urban residents ( $p < 0.05$ ).

For differences that are statistically significant, the following symbols are also used when applicable:

- (+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.
- (-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

## Pharmacotherapy Management of COPD Exacerbation—Bronchodilator

Percentage of MA enrollees aged 40 years and older who had an acute inpatient discharge or emergency department encounter for COPD exacerbation in the past year who were dispensed a bronchodilator within 30 days of experiencing the event, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

### Disparities

- Rural residents who experienced a COPD exacerbation were less likely than urban residents who experienced a COPD exacerbation to have been dispensed a bronchodilator within 30 days of the event. The difference between rural and urban residents was greater than 3 percentage points.

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\* Significantly different from the score for urban residents ( $p < 0.05$ ).

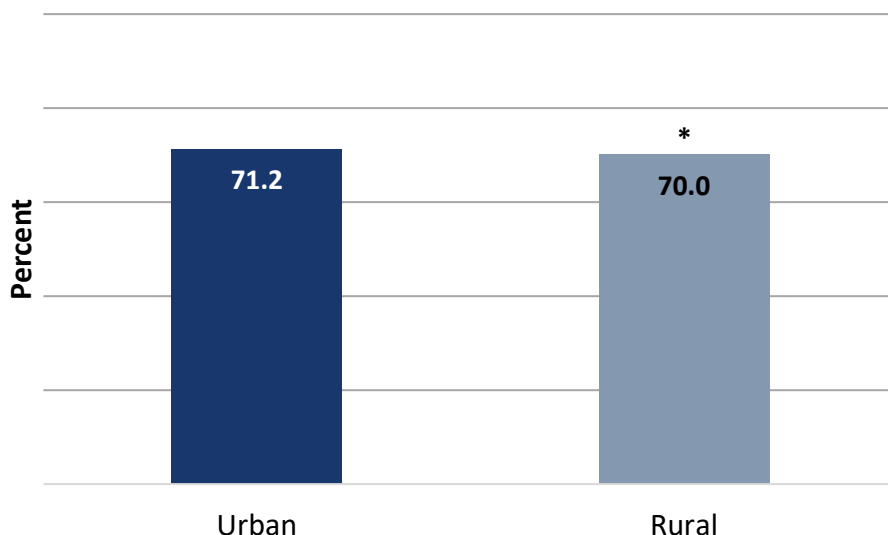
For differences that are statistically significant, the following symbols are also used when applicable:

- (+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.
- (-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

## Clinical Care: Cardiovascular Conditions

### Controlling High Blood Pressure

Percentage of MA enrollees aged 18 to 85 years who had a diagnosis of hypertension whose blood pressure was adequately controlled<sup>†</sup> during the past year, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

### Disparities

- Rural residents who had a diagnosis of hypertension were less likely than urban residents who had a diagnosis of hypertension to have had their blood pressure adequately controlled. The difference between rural and urban residents was less than 3 percentage points.

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\* Significantly different from the score for urban residents ( $p < 0.05$ ).

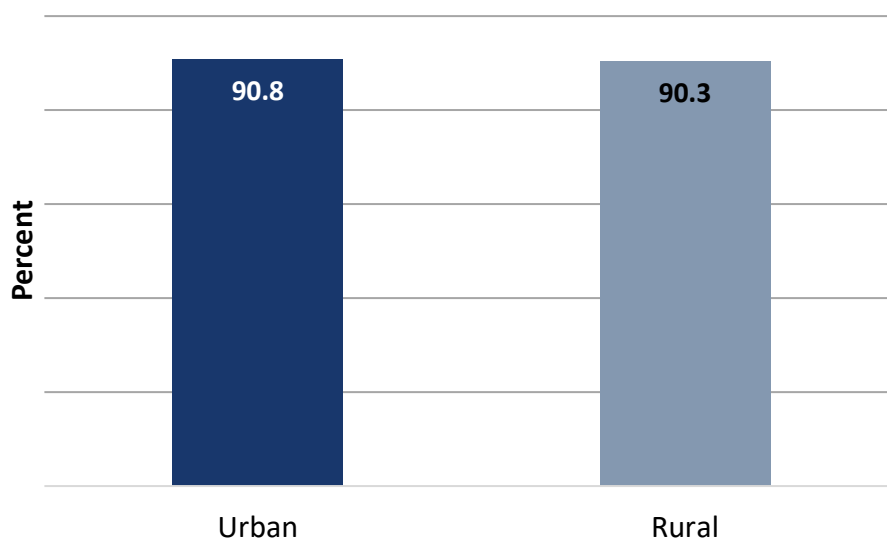
For differences that are statistically significant, the following symbols are also used when applicable:

- (+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.
- (-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

<sup>†</sup> Less than 140/90 for enrollees 18 to 59 years of age and for enrollees 60 to 85 years of age with a diagnosis of diabetes, or less than 150/90 for members 60 to 85 years of age without a diagnosis of diabetes.

### Continuous Beta-Blocker Treatment

Percentage of MA enrollees aged 18 years and older who were hospitalized and discharged alive with a diagnosis of acute myocardial infarction (AMI) who received persistent beta-blocker treatment for six months after discharge, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

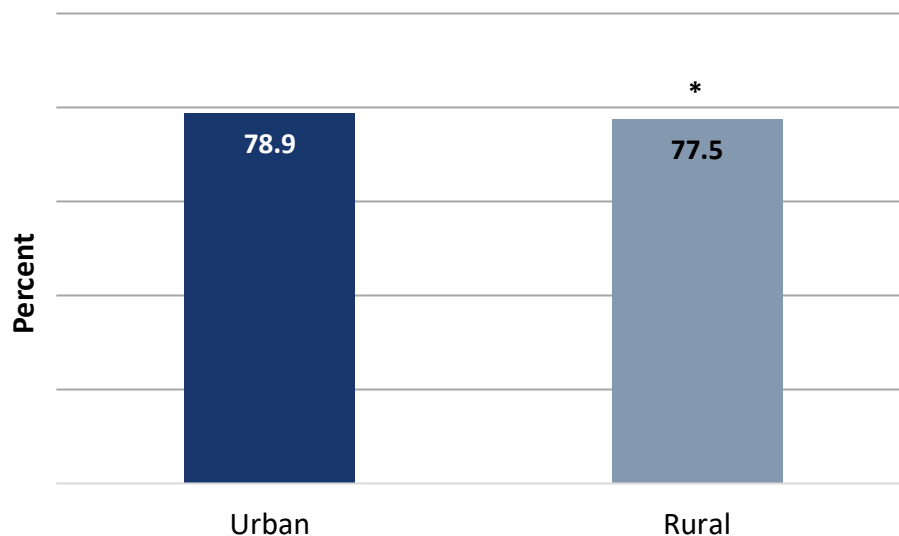
#### Disparities

- Rural residents who were hospitalized for a heart attack were about as likely as urban residents who were hospitalized for a heart attack to have received persistent beta-blocker treatment.



### Statin Use in Patients with Cardiovascular Disease

Percentage of male MA enrollees aged 21 to 75 years and female MA enrollees aged 40 to 75 years with clinical atherosclerotic cardiovascular disease (ASCVD) who received statin therapy, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

#### Disparities

- Rural residents with ASCVD were less likely than urban residents with ASCVD to have received statin therapy. The difference between rural and urban residents was less than 3 percentage points.

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\* Significantly different from the score for urban residents ( $p < 0.05$ ).

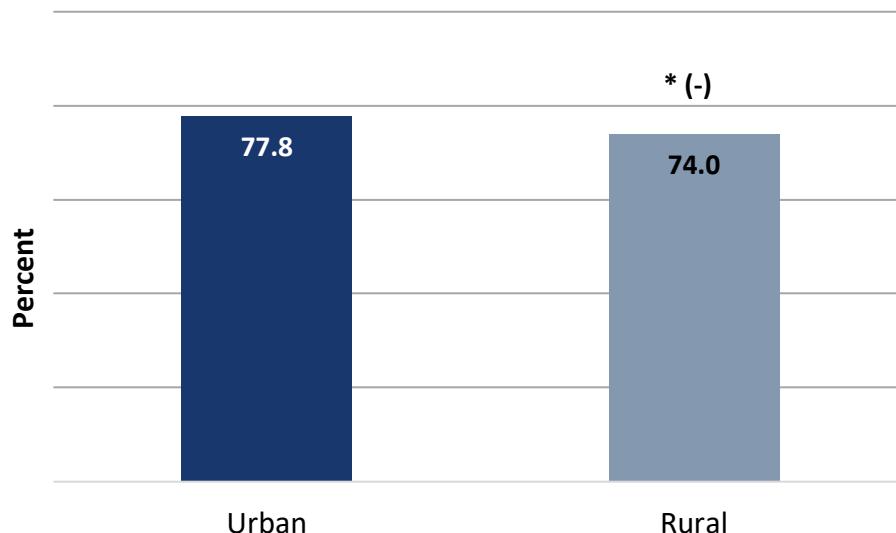
For differences that are statistically significant, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

## Medication Adherence for Cardiovascular Disease—Statins

Percentage of male MA enrollees aged 21 to 75 years and female MA enrollees aged 40 to 75 years with clinical atherosclerotic cardiovascular disease (ASCVD) who were dispensed a statin medication during the measurement year who remained on the medication for at least 80 percent of the treatment period, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

### Disparities

- Rural residents with ASCVD were less likely than urban residents with ASCVD to have had proper statin medication adherence. The difference between rural and urban residents was greater than 3 percentage points.

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\* Significantly different from the score for urban residents ( $p < 0.05$ ).

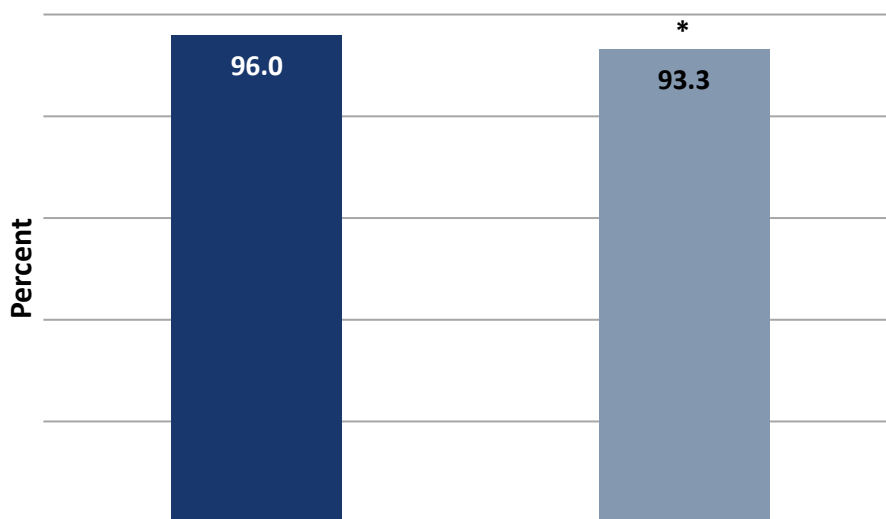
For differences that are statistically significant, the following symbols are also used when applicable:

- (+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.
- (-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

## Clinical Care: Diabetes

### Diabetes Care—Blood Sugar Testing

Percentage of MA enrollees aged 18 to 75 years with diabetes (type 1 and type 2) who had one or more HbA1c tests in the past year, by geography, 2018



SOURCE: Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

### Disparities

- Rural residents with diabetes were less likely than urban residents with diabetes to have had their blood sugar tested at least once in the past year. The difference between rural and urban residents was less than 3 percentage points.

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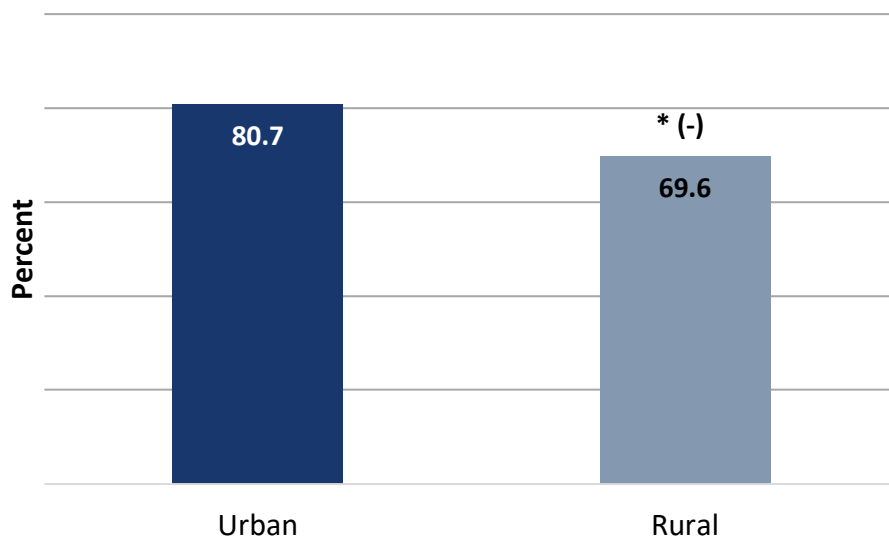
\* Significantly different from the score for urban residents ( $p < 0.05$ ).

For differences that are statistically significant, the following symbols are also used when applicable:

- (+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.
- (-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

### Diabetes Care—Eye Exam

Percentage of MA enrollees aged 18 to 75 years with diabetes (type 1 and type 2) who had an eye exam (retinal) in the past year, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

#### Disparities

- Rural residents with diabetes were less likely than urban residents with diabetes to have had an eye exam in the past year. The difference between rural and urban residents was greater than 3 percentage points.

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\* Significantly different from the score for urban residents ( $p < 0.05$ ).

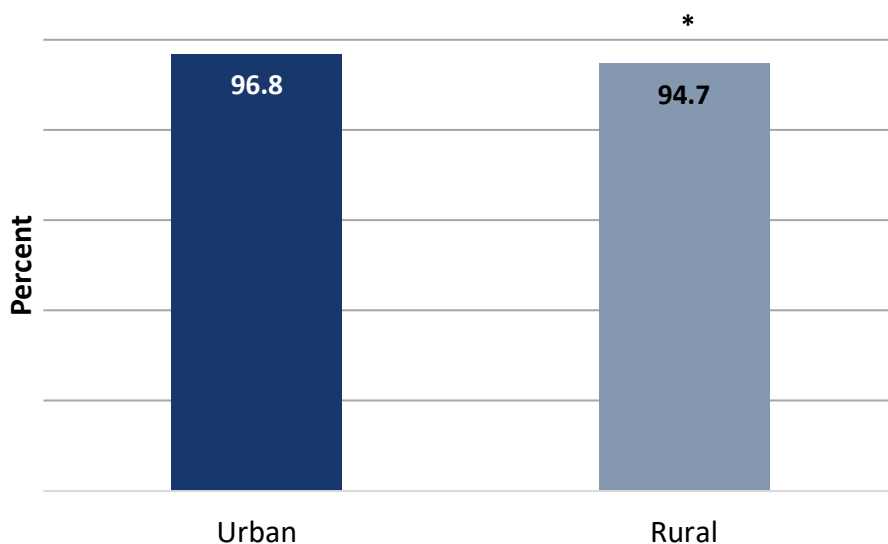
For differences that are statistically significant, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

### Diabetes Care—Kidney Disease Monitoring

Percentage of MA enrollees aged 18 to 75 years with diabetes (type 1 and type 2) who had medical attention for nephropathy in the past year, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

#### Disparities

- Rural residents with diabetes were less likely than urban residents with diabetes to have had medical attention for nephropathy in the past year. The difference between rural and urban residents was less than 3 percentage points.

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\* Significantly different from the score for urban residents ( $p < 0.05$ ).

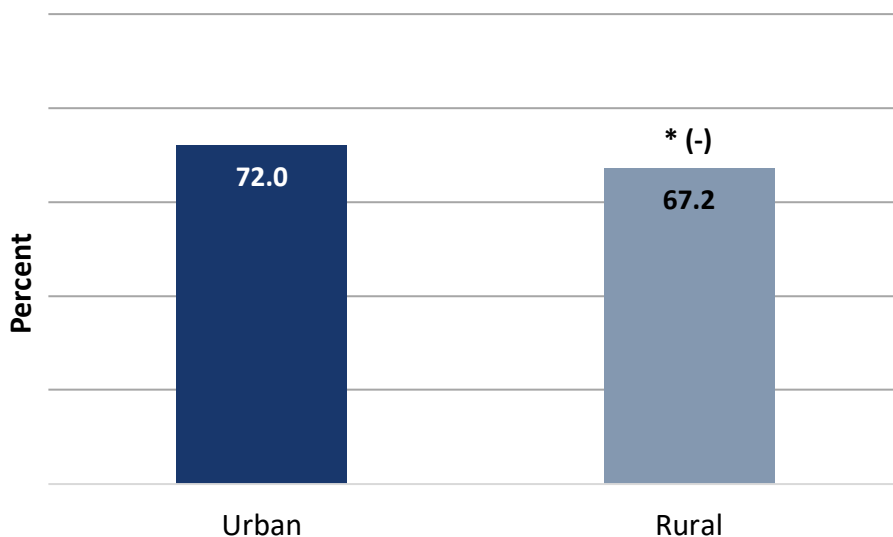
For differences that are statistically significant, the following symbols are also used when applicable:

- (+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.
- (-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.



### Diabetes Care—Blood Pressure Controlled

Percentage of MA enrollees aged 18 to 75 years with diabetes (type 1 and type 2) whose most recent blood pressure was less than 140/90, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

#### Disparities

- Rural residents with diabetes were less likely than urban residents with diabetes to have their blood pressure under control. The difference between rural and urban residents was greater than 3 percentage points.

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\* Significantly different from the score for urban residents ( $p < 0.05$ ).

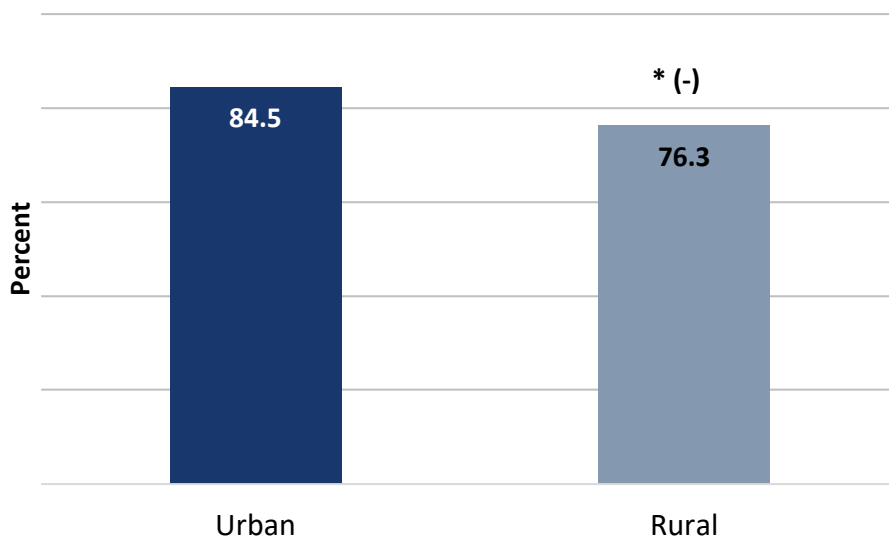
For differences that are statistically significant, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

### Diabetes Care—Blood Sugar Controlled

Percentage of MA enrollees aged 18 to 75 years with diabetes (type 1 and type 2) whose most recent HbA1c level was 9 percent or less, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

#### Disparities

- Rural residents with diabetes were less likely than urban residents with diabetes to have their blood sugar levels under control. The difference between rural and urban residents was greater than 3 percentage points.

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\* Significantly different from the score for urban residents ( $p < 0.05$ ).

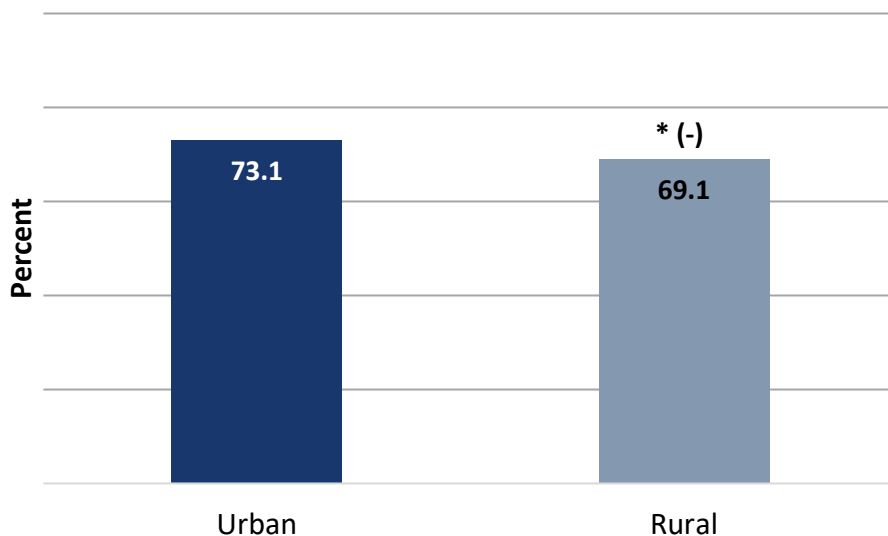
For differences that are statistically significant, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

### Statin Use in Patients with Diabetes

Percentage of MA enrollees aged 40 to 75 years with diabetes (type 1 and type 2)<sup>†</sup> who received statin therapy, by geography, 2018



SOURCE: Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

#### Disparities

- Rural residents with diabetes were less likely than urban residents with diabetes to have received statin therapy. The difference between rural and urban residents was greater than 3 percentage points.

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\* Significantly different from the score for urban residents ( $p < 0.05$ ).

For differences that are statistically significant, the following symbols are also used when applicable:

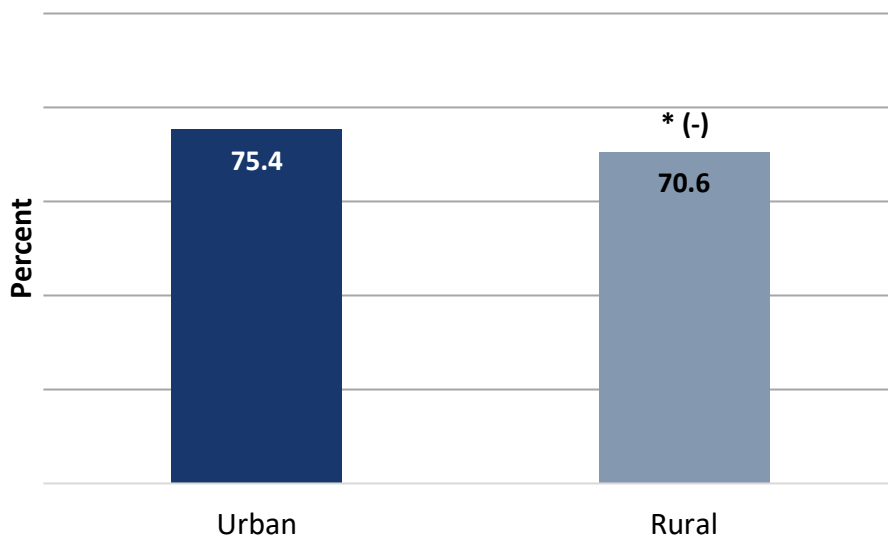
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

<sup>†</sup> Excludes those who also have clinical atherosclerotic cardiovascular disease.

### Medication Adherence for Diabetes—Statins

Percentage of MA enrollees aged 40 to 75 years with diabetes (type 1 and type 2)<sup>†</sup> who were dispensed a statin medication during the measurement year who remained on the medication for at least 80 percent of the treatment period, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

#### Disparities

- Rural residents with diabetes were less likely than urban residents with diabetes to have had proper statin medication adherence. The difference between rural and urban residents was greater than 3 percentage points.

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\* Significantly different from the score for urban residents ( $p < 0.05$ ).

For differences that are statistically significant, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

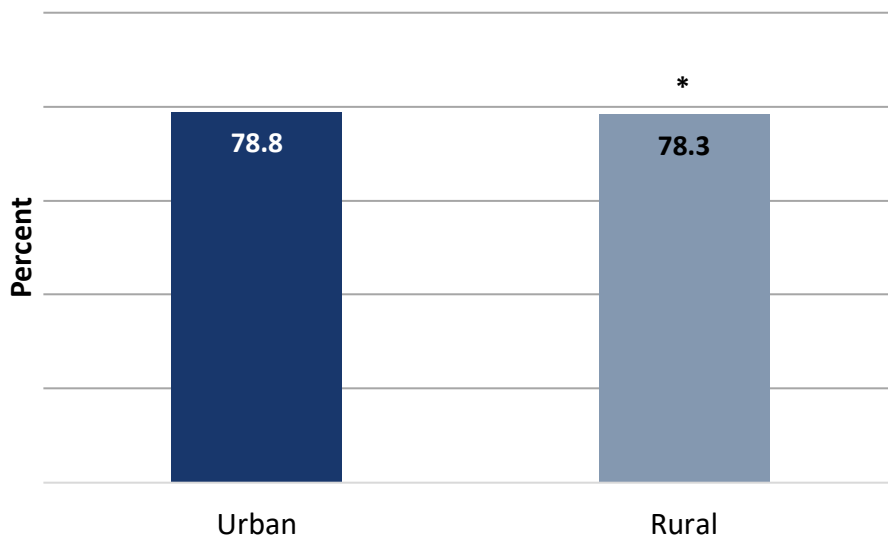
(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

<sup>†</sup> Excludes those who also have clinical atherosclerotic cardiovascular disease.

## Clinical Care: Musculoskeletal Conditions

### Rheumatoid Arthritis Management

Percentage of MA enrollees aged 18 years and older who were diagnosed with rheumatoid arthritis during the past year who were dispensed at least one ambulatory prescription for a disease-modifying antirheumatic drug (DMARD), by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

#### Disparities

- Rural residents who were diagnosed with rheumatoid arthritis were less likely than urban residents who were diagnosed with rheumatoid arthritis to have been dispensed at least one DMARD. The difference between rural and urban residents was less than 3 percentage points.

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\* Significantly different from the score for urban residents ( $p < 0.05$ ).

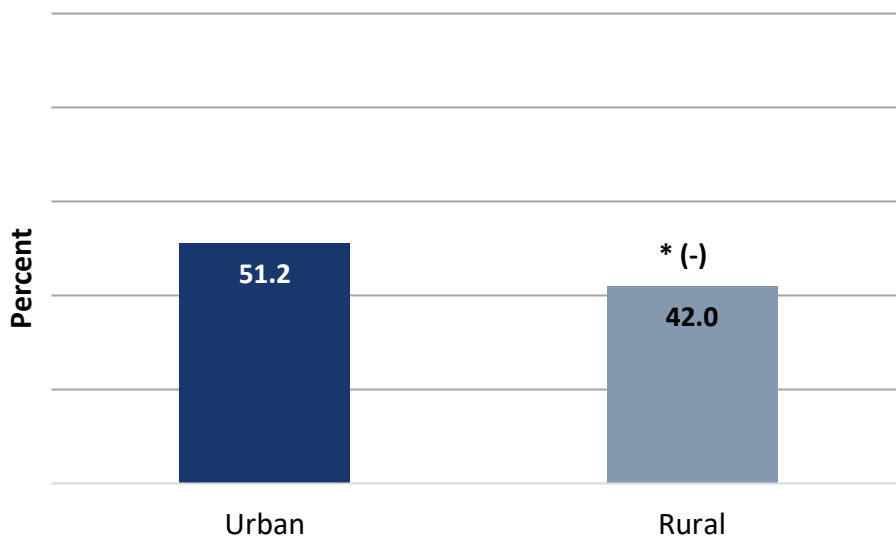
For differences that are statistically significant, the following symbols are also used when applicable:

- (+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.
- (-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.



## Osteoporosis Management in Women Who Had a Fracture

Percentage of MA enrollees (women) aged 67 to 85 years who suffered a fracture who had either a bone mineral density test or a prescription for a drug to treat osteoporosis in the six months after the fracture, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

### Disparities

- Rural women who suffered a fracture were less likely than urban women who suffered a fracture to have had either a bone mineral density test or a prescription for a drug to treat osteoporosis. The difference between rural and urban residents was greater than 3 percentage points.

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\* Significantly different from the score for urban residents ( $p < 0.05$ ).

For differences that are statistically significant, the following symbols are also used when applicable:

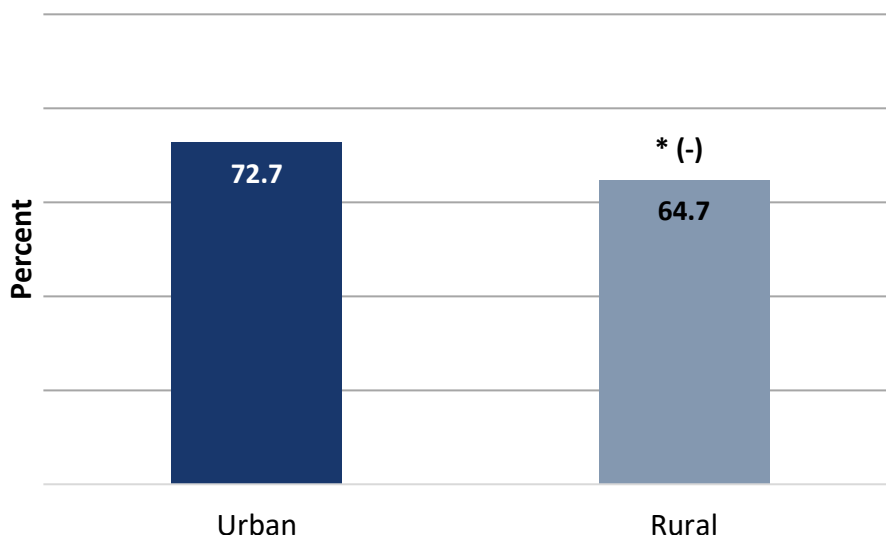
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

## Clinical Care: Behavioral Health

### Antidepressant Medication Management—Acute Phase Treatment

Percentage of MA enrollees aged 18 years and older who were diagnosed with a new episode of major depression who remained on antidepressant medication for at least 84 days, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

#### Disparities

- Rural residents who were diagnosed with a new episode of major depression were less likely than urban residents who were diagnosed with a new episode of major depression to have remained on antidepressant medication for at least 84 days. The difference between rural and urban residents was greater than 3 percentage points.

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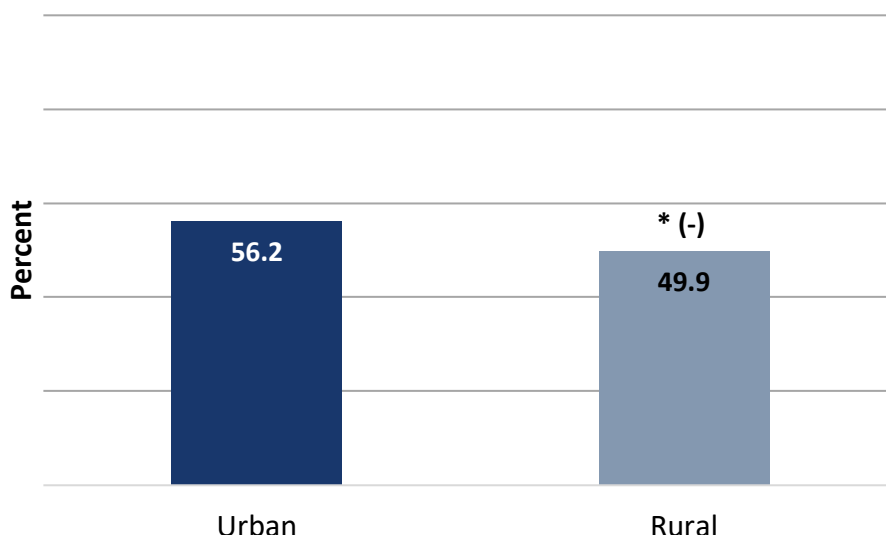
\* Significantly different from the score for urban residents ( $p < 0.05$ ).

For differences that are statistically significant, the following symbols are also used when applicable:

- (+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.
- (-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

## Antidepressant Medication Management—Continuation Phase Treatment

Percentage of MA enrollees aged 18 years and older with a new diagnosis of major depression who were newly treated with antidepressant medication who remained on antidepressant medication for at least 180 days, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

### Disparities

- Rural residents who were diagnosed with a new episode of major depression were less likely than urban residents who were diagnosed with a new episode of major depression to have been treated with and to have remained on antidepressant medication for at least 180 days. The difference between rural and urban residents was greater than 3 percentage points.

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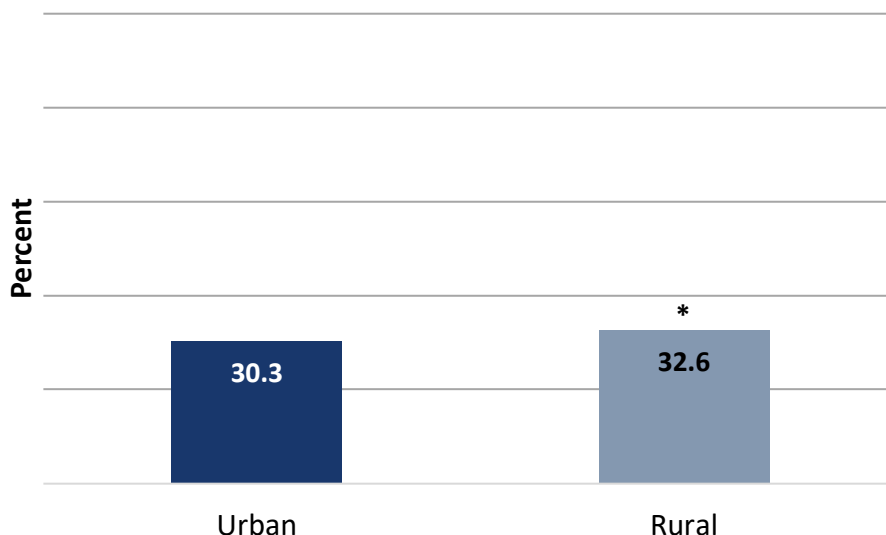
\* Significantly different from the score for urban residents ( $p < 0.05$ ).

For differences that are statistically significant, the following symbols are also used when applicable:

- (+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.
- (-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

### Follow-up After Hospital Stay for Mental Illness (within seven days of discharge)

Percentage of MA enrollees aged 18 years and older<sup>†</sup> who were hospitalized for treatment of selected mental health disorders who had an outpatient visit, an intensive outpatient encounter, or partial hospitalization with a mental health practitioner within seven days of discharge, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

#### Disparities

- Rural residents who were hospitalized for a mental health disorder were more likely than urban residents who were hospitalized for a mental health disorder to have had a follow-up visit with a mental health practitioner within seven days of being discharged. The difference between rural and urban residents was less than 3 percentage points.

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\* Significantly different from the score for urban residents ( $p < 0.05$ ).

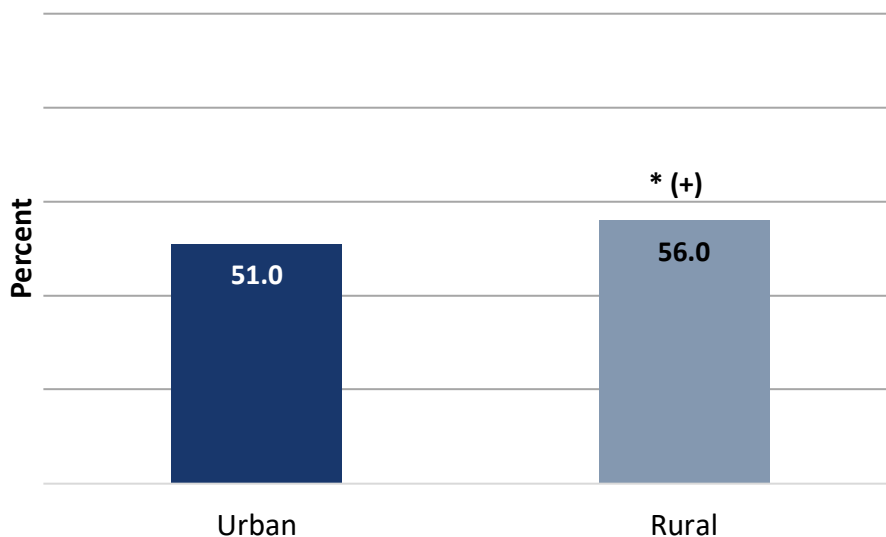
For differences that are statistically significant, the following symbols are also used when applicable:

- (+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.
- (-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

<sup>†</sup> Although the lower-bound age cutoff for this HEDIS measure is six years old, the data used in this report are limited to adults.

## Follow-up After Hospital Stay for Mental Illness (within 30 days of discharge)

Percentage of MA enrollees aged 18 years and older<sup>†</sup> who were hospitalized for treatment of selected mental health disorders who had an outpatient visit, an intensive outpatient encounter, or partial hospitalization with a mental health practitioner within 30 days of discharge, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

### Disparities

- Rural residents who were hospitalized for a mental health disorder were more likely than urban residents who were hospitalized for a mental health disorder to have had a follow-up visit with a mental health practitioner within 30 days of discharge. The difference between rural and urban residents was greater than 3 percentage points.

---

\* Significantly different from the score for urban residents ( $p < 0.05$ ).

For differences that are statistically significant, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

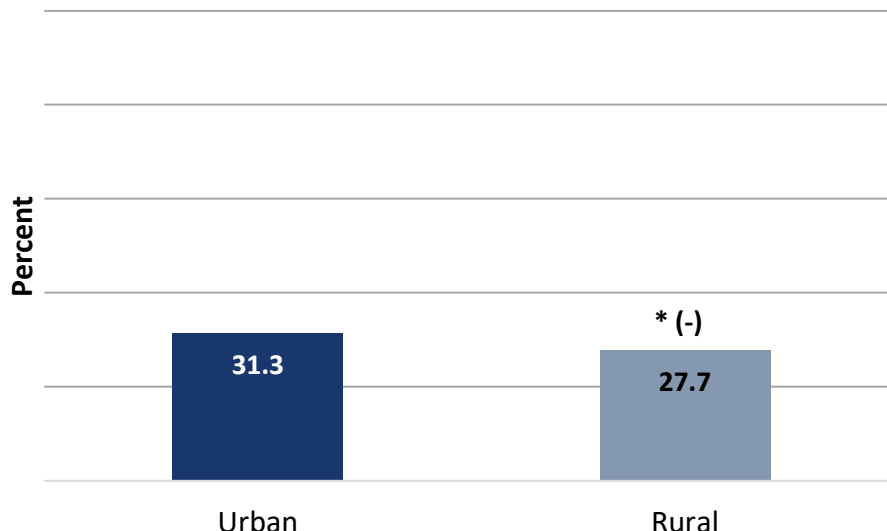
(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

<sup>†</sup> Although the lower-bound age cutoff for this HEDIS measure is six years old, the data used in this report are limited to adults.



## Follow-up After Emergency Department (ED) Visit for Mental Illness (within seven days of discharge)

Percentage of MA enrollees aged 18 years and older<sup>†</sup> who had an ED visit for selected mental health disorders who had an outpatient visit, an intensive outpatient encounter, or partial hospitalization with a mental health practitioner within seven days of the ED visit, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

### Disparities

- Rural residents who had an ED visit for a mental health disorder were less likely than urban residents who had an ED visit for a mental health disorder to have had a follow-up visit with a mental health practitioner within seven days of the ED visit. The difference between rural and urban residents was greater than 3 percentage points.

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\* Significantly different from the score for urban residents ( $p < 0.05$ ).

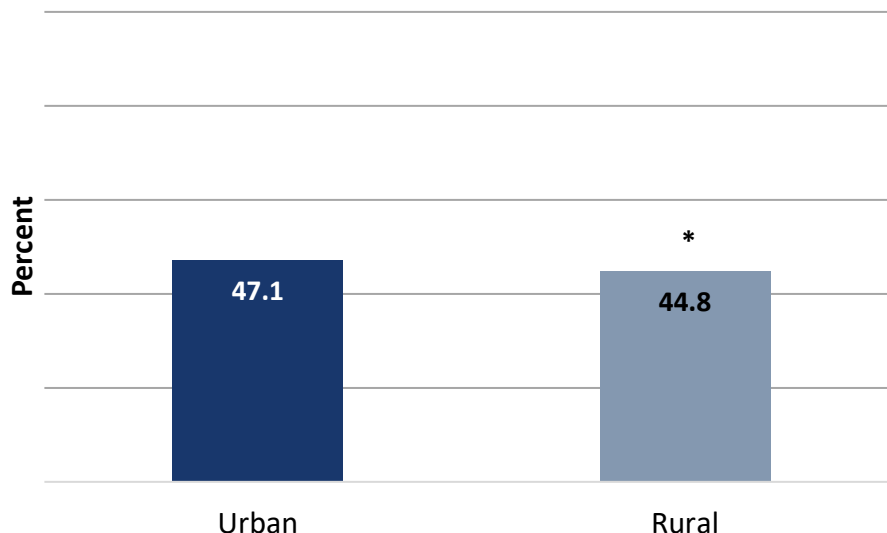
For differences that are statistically significant, the following symbols are also used when applicable:

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- (-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

<sup>†</sup> Although the lower-bound age cutoff for this HEDIS measure is six years old, the data used in this report are limited to adults.

## Follow-up After Emergency Department (ED) Visit for Mental Illness (within 30 days of discharge)

Percentage of MA enrollees aged 18 years and older<sup>†</sup> who had an ED visit for selected mental health disorders who had an outpatient visit, an intensive outpatient encounter, or partial hospitalization with a mental health practitioner within 30 days of the ED visit, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

### Disparities

- Rural residents who had an ED visit for a mental health disorder were less likely than urban residents who had an ED visit for a mental health disorder to have had a follow-up visit with a mental health practitioner within 30 days of the ED visit. The difference between rural and urban residents was less than 3 percentage points.

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\* Significantly different from the score for urban residents ( $p < 0.05$ ).

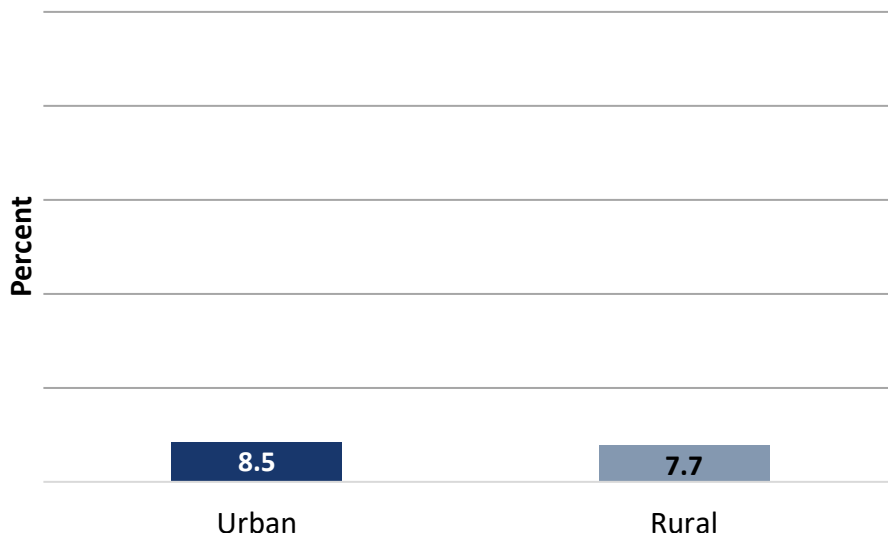
For differences that are statistically significant, the following symbols are also used when applicable:

- (+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.
- (-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

<sup>†</sup> Although the lower-bound age cutoff for this HEDIS measure is six years old, the data used in this report are limited to adults.

## Follow-up After Emergency Department (ED) Visit for Alcohol and Other Drug (AOD) Abuse or Dependence (within seven days of discharge)

Percentage of MA enrollees aged 18 years and older<sup>†</sup> who had an ED visit for AOD abuse or dependence who had a follow-up visit for AOD abuse or dependence within seven days of the ED visit, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

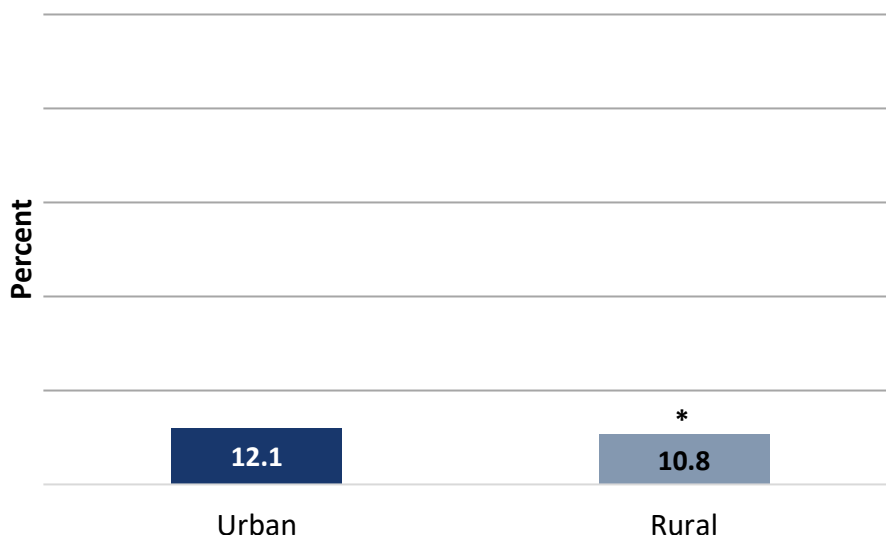
### Disparities

- Rural residents who had an ED visit for AOD abuse or dependence were about as likely as urban residents who had an ED visit for AOD abuse or dependence to have had a follow-up visit for AOD abuse or dependence within seven days of being discharged.

<sup>†</sup> Although the lower-bound age cutoff for this HEDIS measure is 13 years old, the data used in this report are limited to adults.

## Follow-up After Emergency Department (ED) Visit for Alcohol and Other Drug (AOD) Abuse or Dependence (within 30 days of discharge)

Percentage of MA enrollees aged 18 years and older<sup>†</sup> who had an ED visit for AOD abuse or dependence who had a follow-up visit for AOD abuse or dependence within 30 days of the ED visit, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

### Disparities

- Rural residents who had an ED visit for AOD abuse or dependence were less likely than urban residents who had an ED visit for AOD abuse or dependence to have had a follow-up visit for AOD abuse or dependence within 30 days of being discharged. The difference between rural and urban residents was less than 3 percentage points.

---

\* Significantly different from the score for urban residents ( $p < 0.05$ ).

For differences that are statistically significant, the following symbols are also used when applicable:

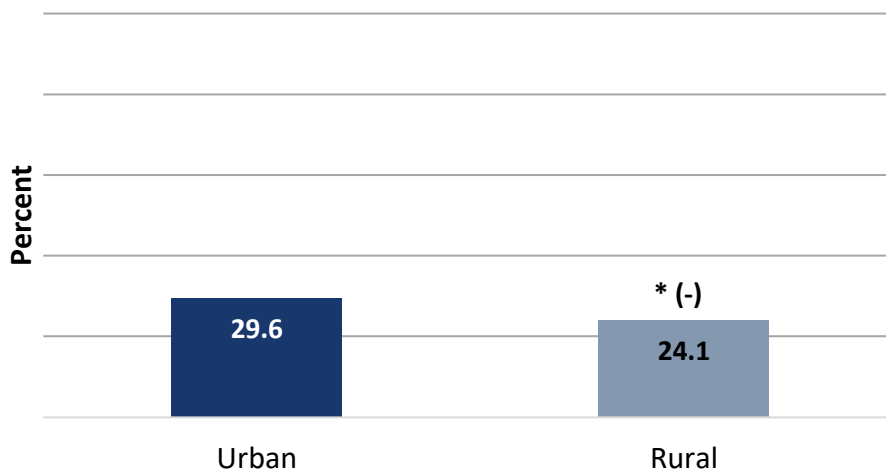
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

<sup>†</sup> Although the lower-bound age cutoff for this HEDIS measure is 13 years old, the data used in this report are limited to adults.

## Initiation of Alcohol and Other Drug Dependence Treatment

Percentage of MA enrollees aged 18 years and older<sup>†</sup> with a new episode of alcohol or other drug (AOD) dependence who initiated<sup>‡</sup> treatment within 14 days of the diagnosis, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

### Disparities

- Rural residents with a new episode of AOD dependence were less likely than urban residents with a new episode of AOD dependence to have initiated treatment within 14 days of the diagnosis. The difference between rural and urban residents was greater than 3 percentage points.

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\* Significantly different from the score for urban residents ( $p < 0.05$ ).

For differences that are statistically significant, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

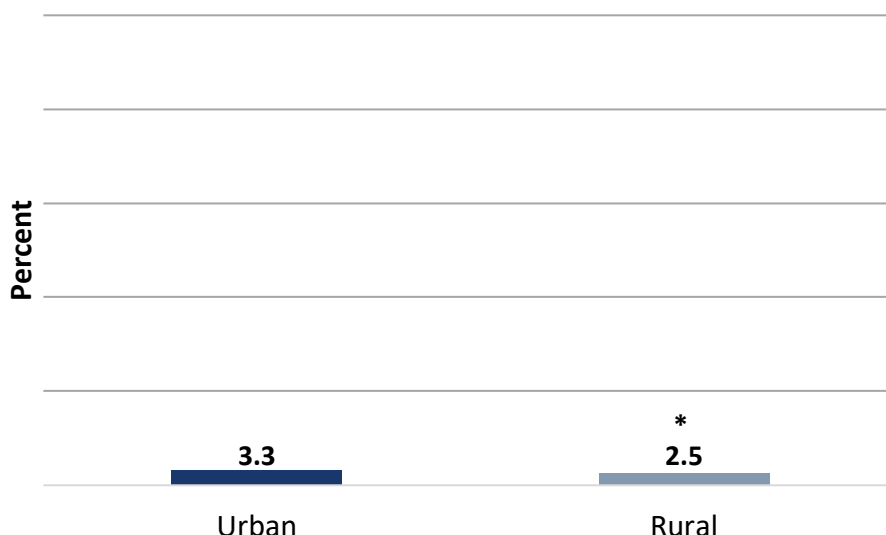
<sup>†</sup> Although the lower-bound age cutoff for this HEDIS measure is 13 years old, the data used in this report are limited to adults.

<sup>‡</sup> Initiation may occur through an inpatient AOD admission, outpatient visit, intensive outpatient encounter, or partial hospitalization.



## Engagement of Alcohol and Other Drug Dependence Treatment

Percentage of MA enrollees aged 18 years and older<sup>†</sup> with a new episode of alcohol or other drug (AOD) dependence who initiated treatment and who had two or more additional services within 30 days of the initiation visit, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

### Disparities

- Overall performance on this measure was lower than on any other measure: Less than 4 percent of those who initiated treatment for AOD dependence received two or more additional services within 30 days of their initial visit for treatment. Rural residents with a new episode of AOD dependence who initiated treatment were less likely than urban residents with a new episode of AOD dependence who initiated treatment to have had two or more additional services within 30 days of their initial visit for treatment. The difference between rural and urban residents was less than 3 percentage points.

---

\* Significantly different from the score for urban residents ( $p < 0.05$ ).

For differences that are statistically significant, the following symbols are also used when applicable:

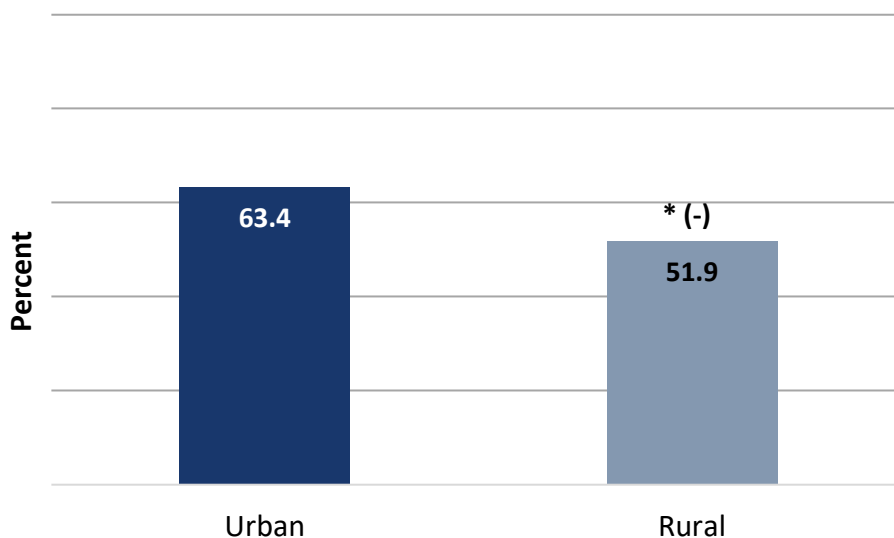
- (+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.
- (-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

<sup>†</sup> Although the lower-bound age cutoff for this HEDIS measure is 13 years old, the data used in this report are limited to adults.

## **Clinical Care: Medication Management and Care Coordination**

### **Medication Reconciliation After Hospital Discharge**

**Percentage of MA enrollees aged 18 years and older who were discharged from an inpatient facility and had their medications reconciled within 30 days, by geography, 2018**



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

### **Disparities**

- Rural residents who were discharged from an inpatient facility were less likely than urban residents who were discharged from an inpatient facility to have had their medications reconciled within 30 days. The difference between rural and urban residents was greater than 3 percentage points.

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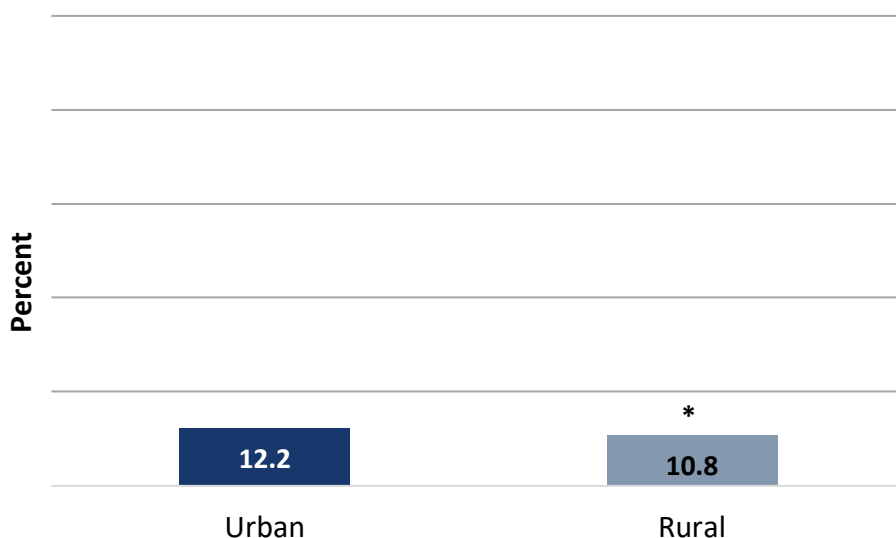
\* Significantly different from the score for urban residents ( $p < 0.05$ ).

For differences that are statistically significant, the following symbols are also used when applicable:

- (+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.
- (-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

### Transitions of Care—Notification of Inpatient Admission

Percentage of MA enrollees aged 18 years and older who were discharged from an inpatient facility whose primary or ongoing care providers were notified of the inpatient admission on the day of or the day following admission, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

#### Disparities

- The primary or ongoing care providers of rural residents who were discharged from an inpatient facility were less likely than the primary or ongoing care providers of urban residents who were discharged from an inpatient facility to have been notified of the inpatient admission on the day of or the day following admission. The difference between these groups was less than 3 percentage points.

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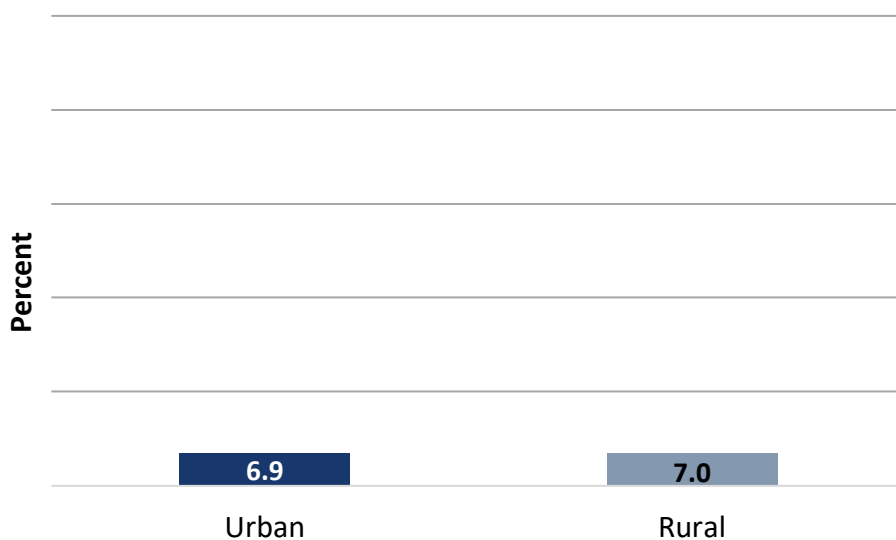
\* Significantly different from the score for urban residents ( $p < 0.05$ ).

For differences that are statistically significant, the following symbols are also used when applicable:

- (+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.
- (-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

### Transitions of Care—Receipt of Discharge Information

Percentage of MA enrollees aged 18 years and older who were discharged from an inpatient facility who received discharge information on the day of or the day following discharge, by geography, 2018



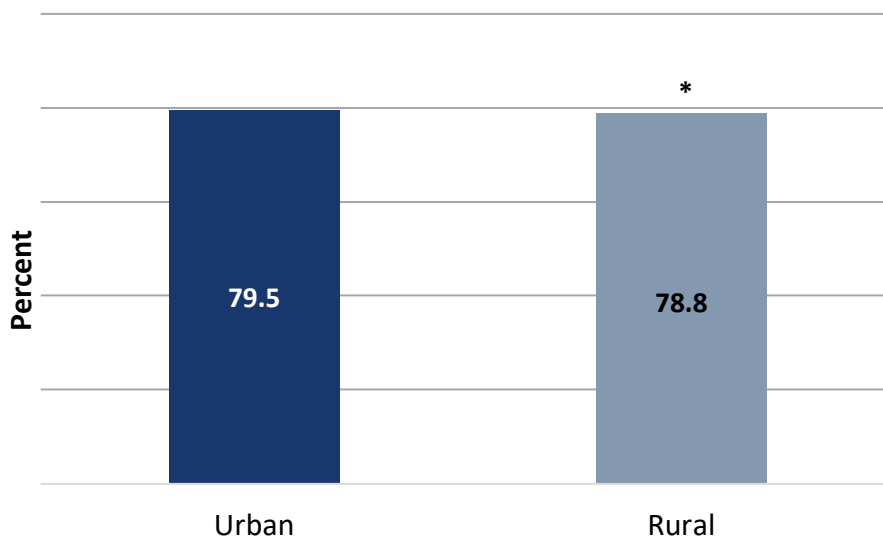
**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

#### Disparities

- Rural residents who were discharged from an inpatient facility were about as likely as urban residents who were discharged from an inpatient facility to have received discharge information on the day of or the day following discharge.

## Transitions of Care—Patient Engagement After Inpatient Discharge

Percentage of MA enrollees aged 18 years and older who were discharged from an inpatient facility for whom patient engagement (office visit, home visit, telehealth) was provided within 30 days of discharge, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

### Disparities

- Rural residents who were discharged from an inpatient facility were less likely than urban residents who were discharged from an inpatient facility to have had an office visit, home visit, or to have received telehealth services within 30 days of discharge. The difference between rural and urban residents was less than 3 percentage points.

---

\* Significantly different from the score for urban residents ( $p < 0.05$ ).

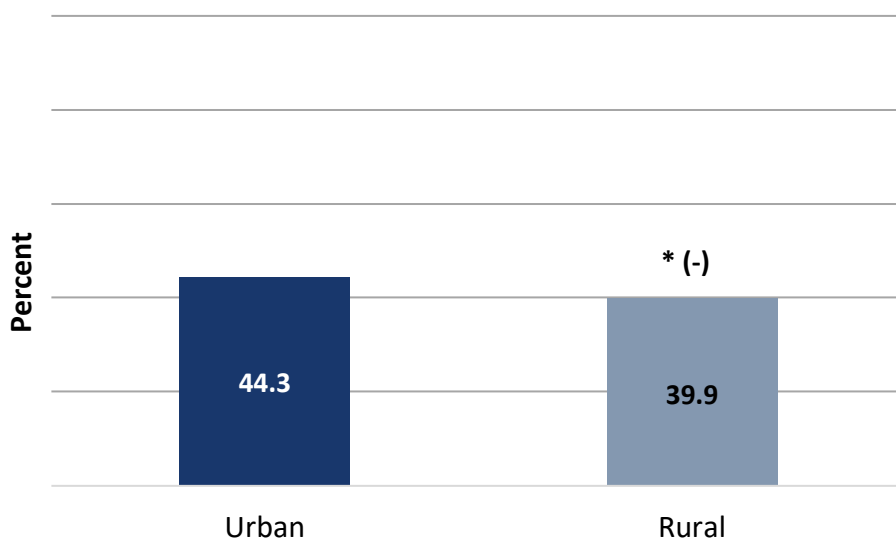
For differences that are statistically significant, the following symbols are also used when applicable:

- (+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.
- (-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.



## Transitions of Care—Medication Reconciliation After Inpatient Discharge

Percentage of MA enrollees aged 18 years and older who were discharged from an inpatient facility for whom medications were reconciled within 30 days of discharge,<sup>†</sup> by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

### Disparities

- Rural residents who were discharged from an inpatient facility were less likely than urban residents who were discharged from an inpatient facility to have had their medications reconciled within 30 days of discharge. The difference between rural and urban residents was greater than 3 percentage points.

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\* Significantly different from the score for urban residents ( $p < 0.05$ ).

For differences that are statistically significant, the following symbols are also used when applicable:

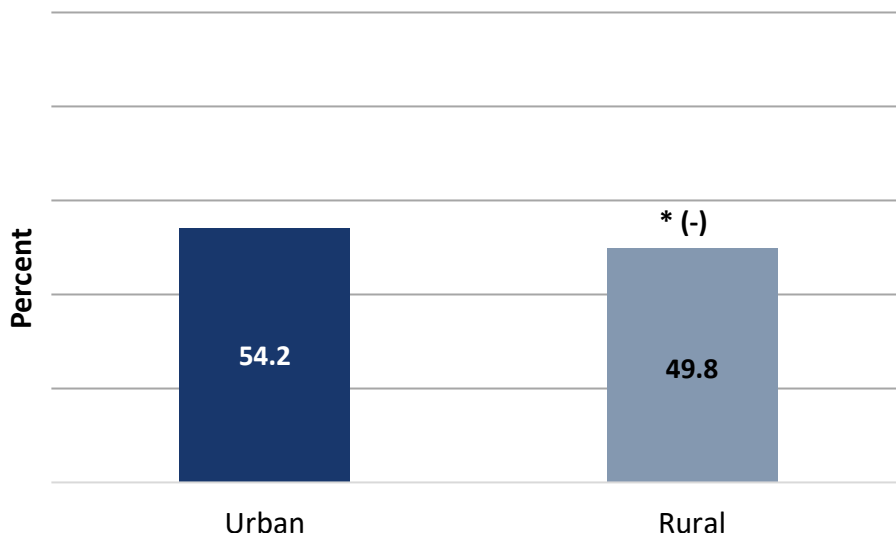
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

<sup>†</sup> Scores on this measure may differ from scores on the medication reconciliation measure presented on page 45 because of different rules governing the collection of the data.

## Follow-Up After Emergency Department (ED) Visit for People with High-Risk Multiple Chronic Conditions

Percentage of MA enrollees aged 18 years and older with multiple high-risk chronic conditions<sup>†</sup> who received follow-up care within seven days of an ED visit, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

### Disparities

- Rural residents with multiple high-risk chronic conditions<sup>†</sup> were less likely than urban residents with multiple high-risk chronic conditions to have received follow-up care within seven days of an ED visit. The difference between rural and urban residents was greater than 3 percentage points.

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\* Significantly different from the score for urban residents ( $p < 0.05$ ).

For differences that are statistically significant, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

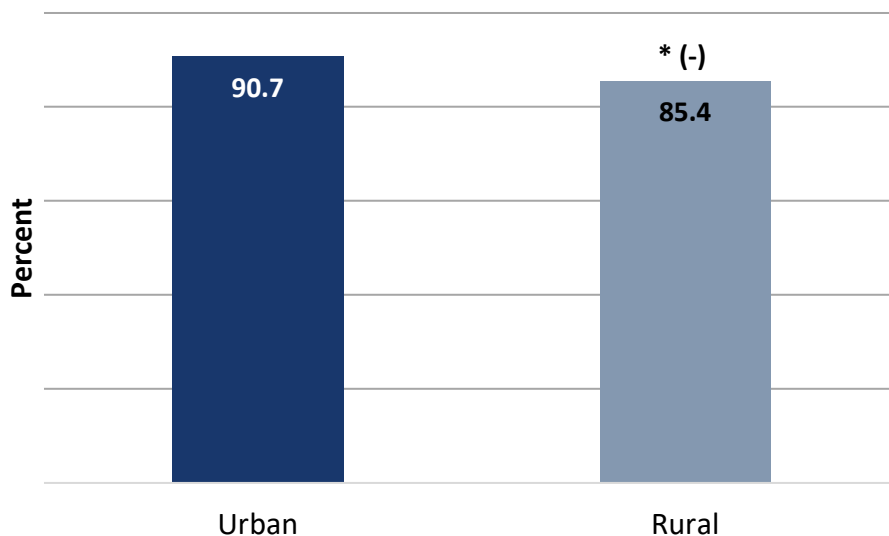
(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

<sup>†</sup> Conditions include COPD and asthma, Alzheimer's disease and related disorders, chronic kidney disease, depression, heart failure, acute myocardial infarction, atrial fibrillation, and stroke and transient ischemic attack.

## Clinical Care: Overuse/Appropriateness

### Avoiding Potentially Harmful Drug-Disease Interactions in Elderly Patients with Chronic Renal Failure

Percentage of MA enrollees aged 65 years and older with chronic renal failure who were not dispensed a prescription for a potentially harmful medication,<sup>†</sup> by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

#### Disparities

- Use of potentially harmful medication<sup>†</sup> was avoided less often for elderly rural residents with chronic renal failure than for elderly urban residents with chronic renal failure. The difference between rural and urban residents was greater than 3 percentage points.

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\* Significantly different from the score for urban residents ( $p < 0.05$ ).

For differences that are statistically significant, the following symbols are also used when applicable:

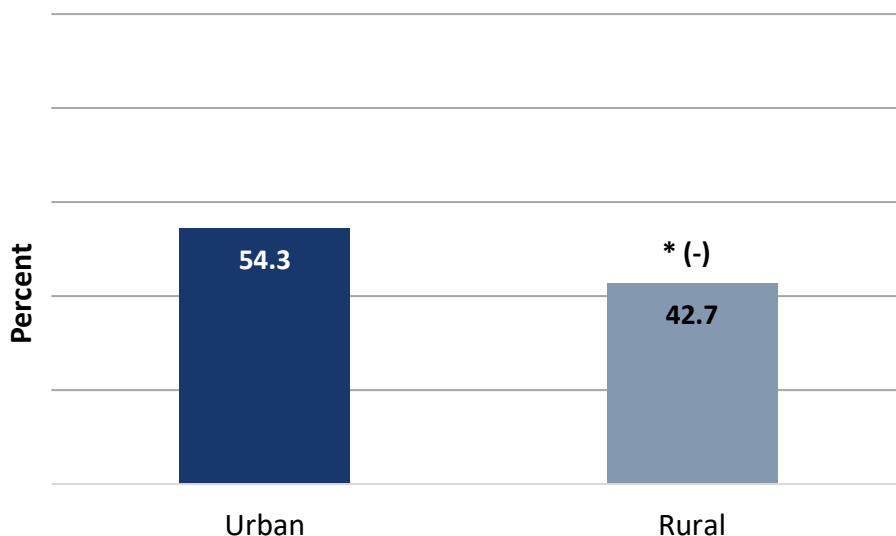
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

<sup>†</sup> This includes cyclooxygenase-2 (COX-2) selective nonsteroidal anti-inflammatory drugs (NSAIDs) or nonaspirin NSAIDs.

## Avoiding Potentially Harmful Drug-Disease Interactions in Elderly Patients with Dementia

Percentage of MA enrollees aged 65 years and older with dementia who were not dispensed a prescription for a potentially harmful medication,<sup>†</sup> by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

### Disparities

- Use of potentially harmful medication<sup>†</sup> was avoided less often for elderly rural residents with dementia than for elderly urban residents with dementia. The difference between rural and urban residents was greater than 3 percentage points.

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\* Significantly different from the score for urban residents ( $p < 0.05$ ).

For differences that are statistically significant, the following symbols are also used when applicable:

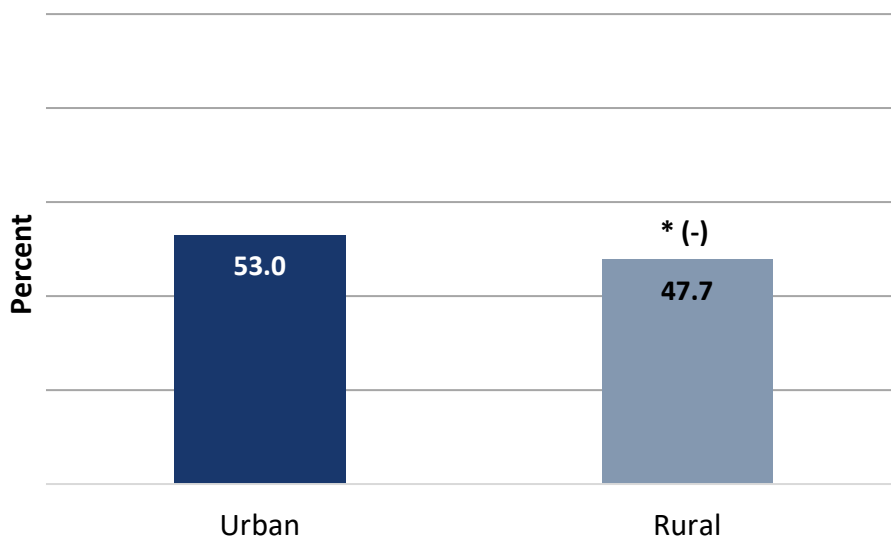
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

<sup>†</sup> This includes antiemetics, antipsychotics, benzodiazepines, tricyclic antidepressants, H2 receptor antagonists, nonbenzodiazepine hypnotics, and anticholinergic agents.

## Avoiding Potentially Harmful Drug-Disease Interactions in Elderly Patients with a History of Falls

Percentage of MA enrollees aged 65 years and older with a history of falls who were not dispensed a prescription for a potentially harmful medication,<sup>†</sup> by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

### Disparities

- Use of potentially harmful medication<sup>†</sup> was avoided less often for elderly rural residents with a history of falls than for elderly urban residents with a history of falls. The difference between rural and urban residents was greater than 3 percentage points.

---

\* Significantly different from the score for urban residents ( $p < 0.05$ ).

For differences that are statistically significant, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

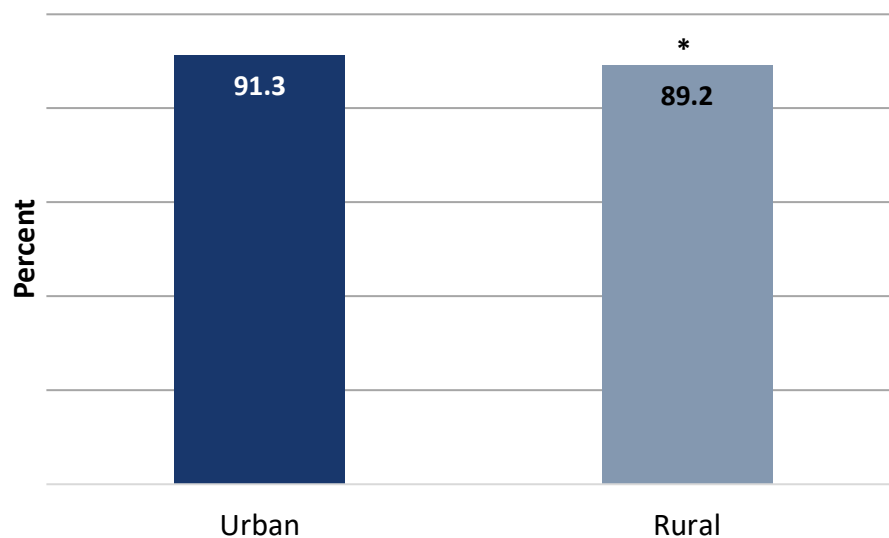
(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

<sup>†</sup> This includes anticonvulsants, nonbenzodiazepine hypnotics, selective serotonin reuptake inhibitors (SSRIs), antiemetics, antipsychotics, benzodiazepines, and tricyclic antidepressants.



### Avoiding Use of High-Risk Medications in the Elderly

Percentage of MA enrollees aged 65 years and older who were not prescribed a high-risk medication, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

#### Disparities

- Use of high-risk medication was avoided less often for rural residents than for urban residents. The difference between rural and urban residents was less than 3 percentage points.

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\* Significantly different from the score for urban residents ( $p < 0.05$ ).

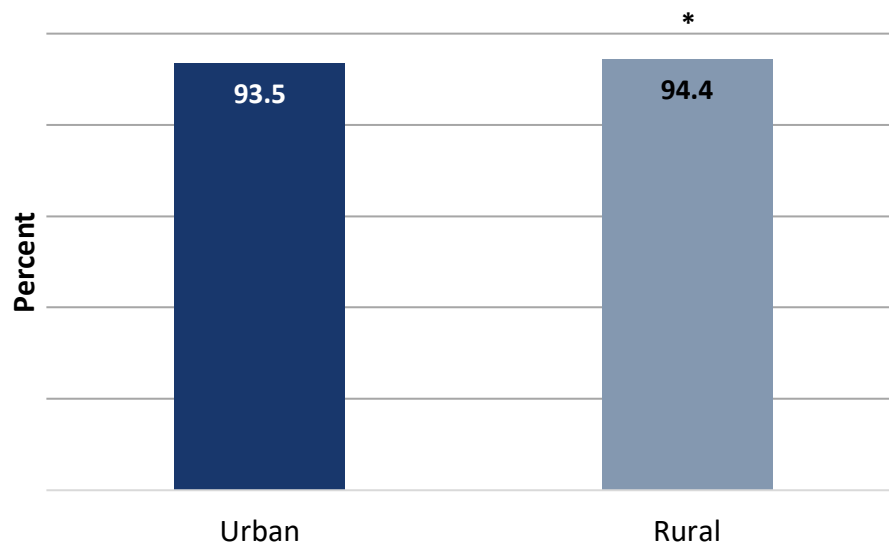
For differences that are statistically significant, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

## Avoiding Use of Opioids at High Dosage

Percentage of MA enrollees aged 18 years and older who were not prescribed opioids at a high dosage<sup>†</sup> for more than 14 days, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

### Disparities

- Use of opioids at a high dosage<sup>†</sup> for more than 14 days was avoided more often for rural residents than for urban residents. The difference between rural and urban residents was less than 3 percentage points.

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\* Significantly different from the score for urban residents ( $p < 0.05$ ).

For differences that are statistically significant, the following symbols are also used when applicable:

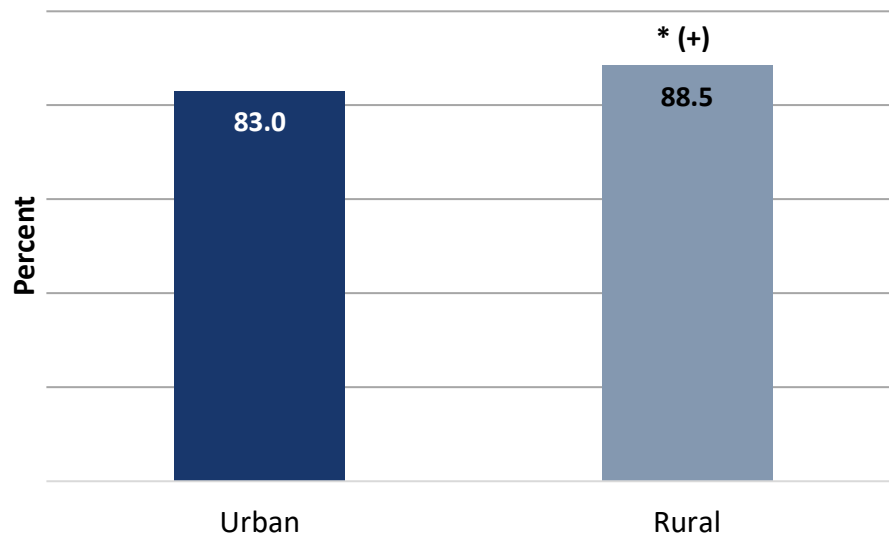
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

<sup>†</sup> Average morphine equivalent dose > 120 mg

### Avoiding Use of Opioids from Multiple Prescribers

Percentage of MA enrollees aged 18 years and older who did not receive prescriptions for opioids from four or more prescribers in the past year, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

#### Disparities

- Use of opioids from multiple prescribers was avoided more often for rural residents than for urban residents. The difference between rural and urban residents was greater than 3 percentage points.

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\* Significantly different from the score for urban residents ( $p < 0.05$ ).

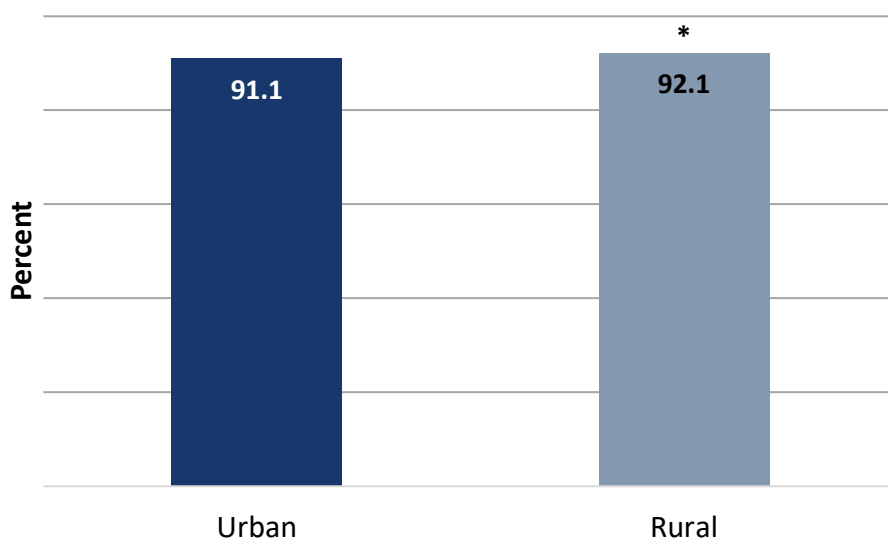
For differences that are statistically significant, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

### Avoiding Use of Opioids from Multiple Pharmacies

Percentage of MA enrollees aged 18 years and older who did not receive prescriptions for opioids from four or more pharmacies in the past year, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

#### Disparities

- Use of opioids from multiple pharmacies was avoided more often for rural residents than for urban residents. The difference between rural and urban residents was less than 3 percentage points.

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\* Significantly different from the score for urban residents ( $p < 0.05$ ).

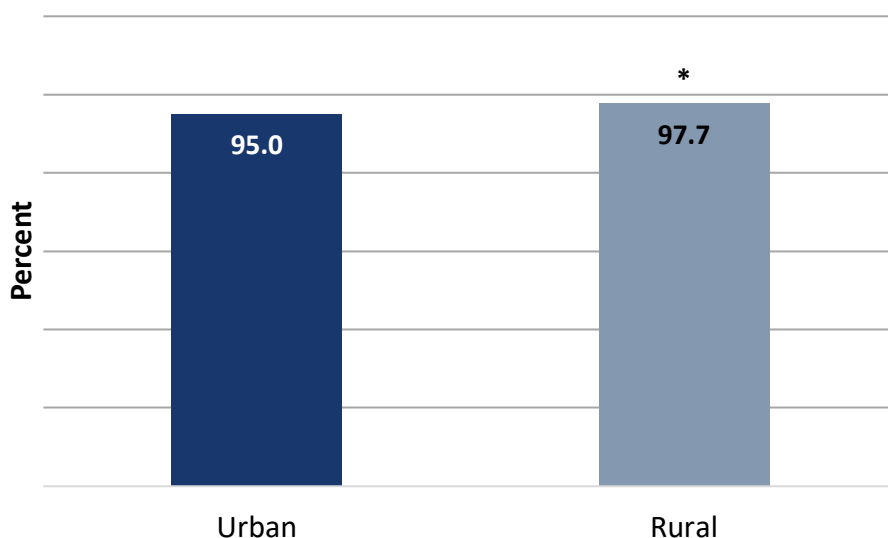
For differences that are statistically significant, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

## Avoiding Use of Opioids from Multiple Prescribers and Pharmacies

Percentage of MA enrollees aged 18 years and older who did not receive prescriptions for opioids from four or more prescribers and four or more pharmacies in the past year, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

### Disparities

- Use of opioids from multiple prescribers and pharmacies was avoided more often for rural residents than for urban residents. The difference between rural and urban residents was less than 3 percentage points.

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\* Significantly different from the score for urban residents ( $p < 0.05$ ).

For differences that are statistically significant, the following symbols are also used when applicable:

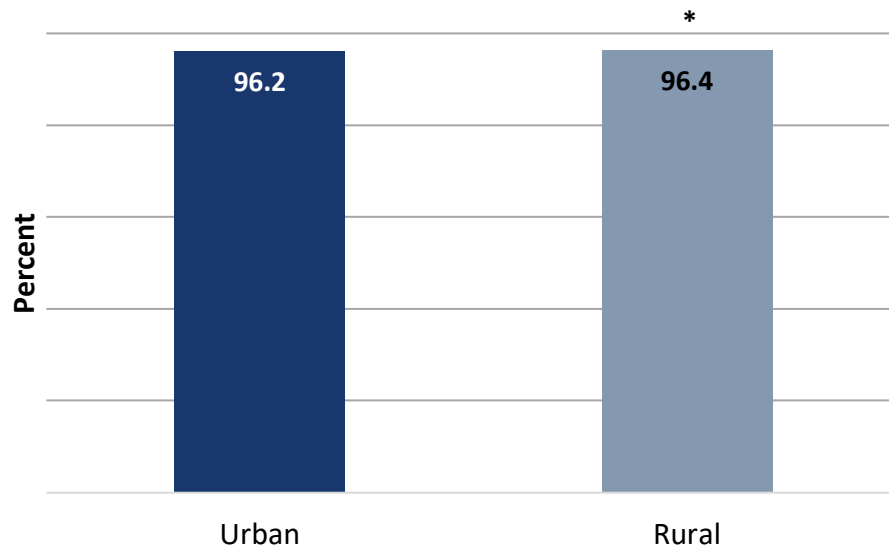
- (+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.
- (-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.



## Clinical Care: Access/Availability of Care

### Older Adults' Access to Preventive/Ambulatory Services

Percentage of MA enrollees aged 65 years and older who had an ambulatory or preventive care visit, by geography, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

### Disparities

- Rural residents were more likely than urban residents to have had an ambulatory or preventive care visit. The difference between rural and urban residents was less than 3 percentage points.

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\* Significantly different from the score for urban residents ( $p < 0.05$ ).

For differences that are statistically significant, the following symbols are also used when applicable:

- (+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.
- (-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

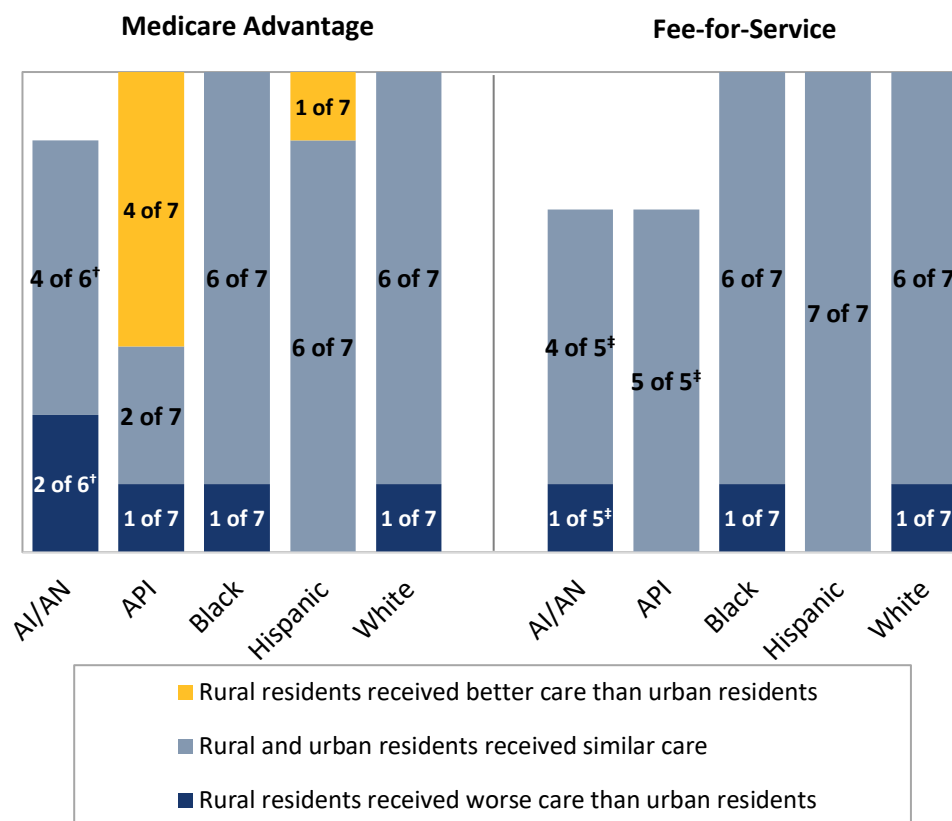


## **Section II: Rural-Urban Disparities in Health Care in Medicare by Racial and Ethnic Group**



## Rural-Urban Disparities in Care by Racial and Ethnic Group: All Patient Experience Measures

Number of patient experience measures for which rural AI/AN, API, Black, Hispanic, and White beneficiaries reported experiences that were worse than, similar to, or better than the experiences reported by urban AI/AN, API, Black, Hispanic, and White beneficiaries in 2018



**SOURCE:** This chart summarizes data from all FFS Medicare and MA beneficiaries nationwide who participated in the 2018 Medicare CAHPS survey.

**NOTES:** AI/AN = American Indian or Alaska Native. API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> There were not enough data from rural MA AI/AN beneficiaries to make a rural-urban comparison on one patient experience measure.

<sup>‡</sup> There were not enough data from rural and urban FFS AI/AN beneficiaries or from rural API beneficiaries to make rural-urban comparisons for these groups on two patient experience measures.

Within each racial or ethnic group, the relative difference between rural and urban residents is used to assess disparities.

- **Better** = Rural residents received better care than urban residents. Differences are statistically significant ( $p < 0.05$ ), are equal to or larger than 3 points<sup>††</sup> on a 0–100 scale, and favor rural residents.
- **Similar** = Rural and urban residents received care of similar quality. Differences are less than 3 points on a 0–100 scale and/or not statistically significant.
- **Worse** = Rural residents received worse care than urban residents. Differences are statistically significant, are equal to or larger than 3 points on a 0–100 scale, and favor urban residents.

**Rural AI/AN MA beneficiaries received worse care than urban AI/AN MA beneficiaries**

- Getting needed care
- Doctors who communicate well

**Rural API MA beneficiaries received worse care than urban API MA beneficiaries**

- Annual flu vaccine

**Rural API MA beneficiaries received better care than urban API MA beneficiaries**

- Getting needed care
- Getting appointments and care quickly
- Customer service
- Getting needed prescription drugs

**Rural Black MA beneficiaries received worse care than urban Black MA beneficiaries**

- Getting appointments and care quickly

**Rural Hispanic MA beneficiaries received better care than urban Hispanic MA beneficiaries**

- Getting needed prescription drugs

**Rural White MA beneficiaries received worse care than urban White MA beneficiaries**

- Annual flu vaccine

**Rural AI/AN FFS beneficiaries received worse care than urban AI/AN FFS beneficiaries**

- Getting needed care

**Rural Black FFS beneficiaries received worse care than urban Black FFS beneficiaries**

- Annual flu vaccine

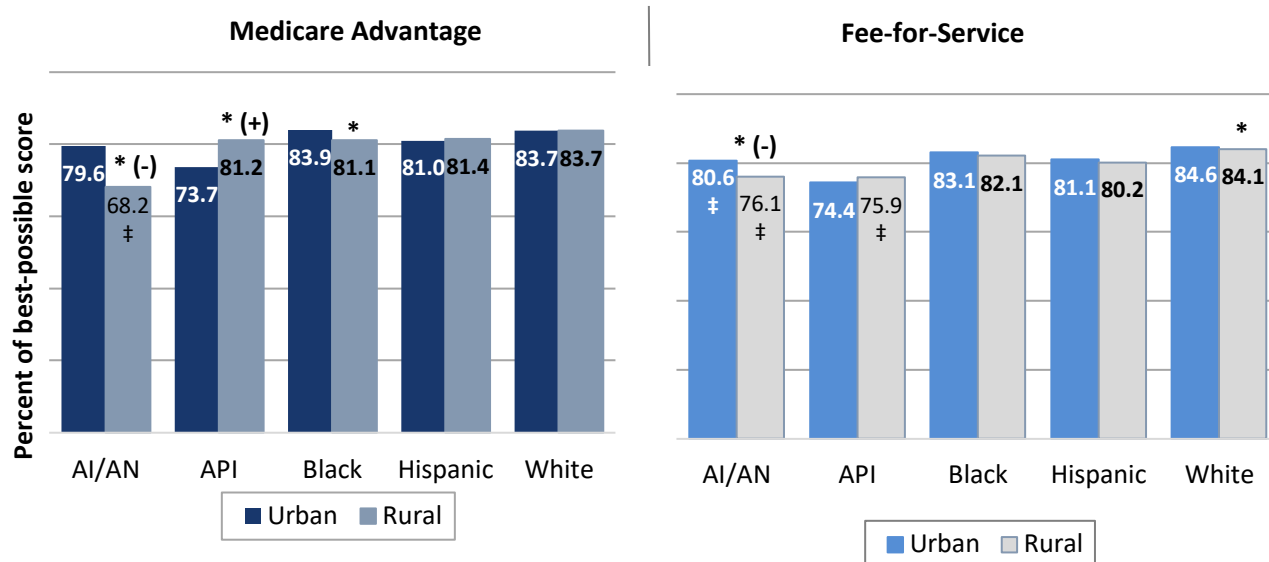
**Rural White FFS beneficiaries received worse care than urban White FFS beneficiaries**

- Annual flu vaccine

## Patient Experience

### Patient Experience: Getting Needed Care

Percentage of the best possible score (on a 0–100 scale) earned on how easy it is for patients to get needed care,<sup>†</sup> by geography within racial and ethnic group, 2018



**SOURCE:** Data from the Medicare CAHPS survey, 2018.

**NOTE:** = American Indian or Alaska Native. API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> This score is based on fewer than 400 completed measures, and thus its precision may be low.

### Disparities

- In both MA and FFS, AI/AN beneficiaries residing in rural areas reported worse<sup>††</sup> experiences getting needed care than AI/AN beneficiaries residing in urban areas. In each case, the difference between rural and urban AI/AN beneficiaries was greater than 3 points on a 0–100 scale.
- API MA beneficiaries residing in rural areas reported better experiences getting needed care than API MA beneficiaries residing in urban areas. The difference between rural and urban API MA beneficiaries was greater than 3 points on a 0–100 scale. API FFS beneficiaries residing in rural areas reported experiences getting needed care that were similar to the experiences reported by API FFS beneficiaries residing in urban areas.
- Black MA beneficiaries residing in rural areas reported worse experiences getting needed care than Black MA beneficiaries residing in urban areas. The difference between rural and urban Black MA beneficiaries was less than 3 points on a 0–100 scale. Black FFS beneficiaries residing in rural areas reported experiences getting needed care that were similar to the experiences reported by Black FFS beneficiaries residing in urban areas.
- In both MA and FFS, Hispanic beneficiaries residing in rural areas reported experiences getting needed care that were similar to the experiences reported by Hispanic beneficiaries residing in urban areas.



- White MA beneficiaries residing in rural areas reported experiences getting needed care that were similar to the experiences reported by White MA beneficiaries residing in urban areas. White FFS beneficiaries residing in rural areas reported worse experiences getting needed care than White FFS beneficiaries residing in urban areas. The difference between rural and urban White FFS beneficiaries was less than 3 points on a 0–100 scale.

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\* Significantly different from the score for urban residents of the same racial and ethnic group and coverage type ( $p < 0.05$ ).

For statistically significant differences between rural and urban residents of the same race or ethnicity and coverage type, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

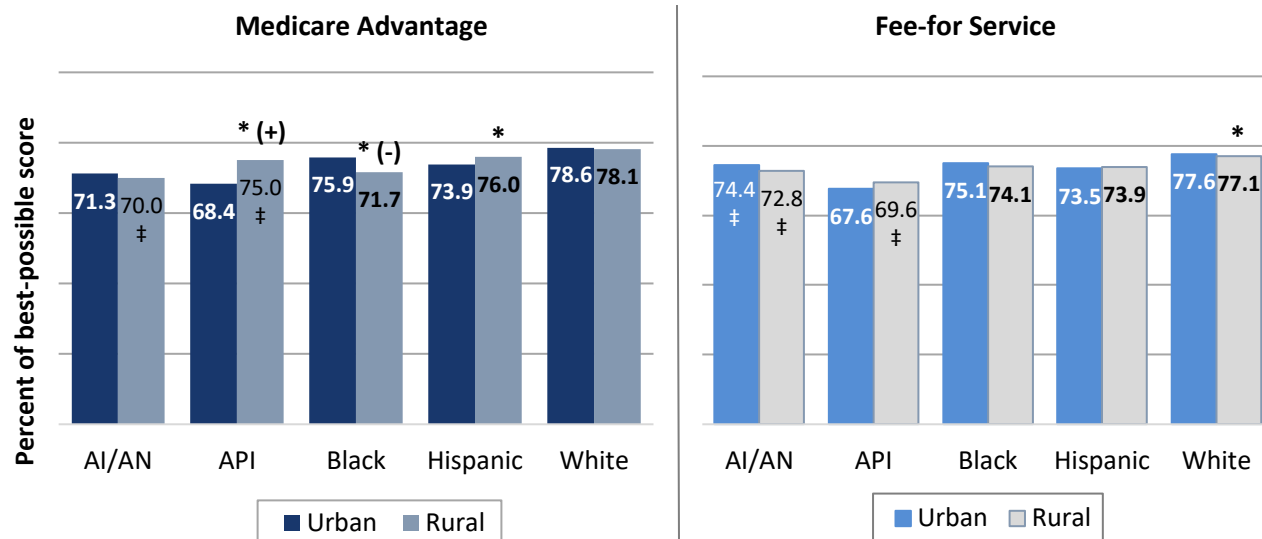
(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

<sup>†</sup> This includes how often in the last six months patients got appointments with specialists as soon as they needed them and how easy it was to get needed care, tests, or treatment.

<sup>††</sup> Unlike on the previous two pages, we use the terms “better” or “worse” to describe all statistically significant differences on individual patient experience measures. We note in the “Disparities” section for each of these measures where differences are greater or less than 3 points.

## Patient Experience: Getting Appointments and Care Quickly

Percentage of the best possible score (on a 0–100 scale) earned on how quickly patients get appointments and care,<sup>†</sup> by geography within racial and ethnic group, 2018



**SOURCE:** Data from the Medicare CAHPS survey, 2018.

**NOTES:** = American Indian or Alaska Native. API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>‡</sup> This score is based on fewer than 400 completed measures, and thus its precision may be low.

### Disparities

- In both MA and FFS, AI/AN beneficiaries residing in rural areas reported experiences getting appointments and care quickly that were similar to the experiences reported by AI/AN beneficiaries residing in urban areas.
- API MA beneficiaries residing in rural areas reported better experiences getting appointments and care quickly than API MA beneficiaries residing in urban areas. The difference between rural and urban API MA beneficiaries was greater than 3 points on a 0–100 scale. API FFS beneficiaries residing in rural areas reported experiences getting appointments and care quickly that were similar to the experiences reported by API FFS beneficiaries residing in urban areas.
- Black MA beneficiaries residing in rural areas reported worse experiences getting appointments and care quickly than Black MA beneficiaries residing in urban areas. The difference between rural and urban Black MA beneficiaries was greater than 3 points on a 0–100 scale. Black FFS beneficiaries residing in rural areas reported experiences getting appointments and care quickly that were similar to the experiences reported by Black FFS beneficiaries residing in urban areas.
- Hispanic MA beneficiaries residing in rural areas reported better experiences getting appointments and care quickly than Hispanic MA beneficiaries residing in urban areas. The difference between rural and urban Hispanic MA beneficiaries was less than 3 points on a 0–100 scale. Hispanic FFS beneficiaries residing in rural areas reported experiences getting

appointments and care quickly that were similar to the experiences reported by Hispanic FFS beneficiaries residing in urban areas.

- White MA beneficiaries residing in rural areas reported experiences getting appointments and care quickly that were similar to the experiences reported by White MA beneficiaries residing in urban areas. White FFS beneficiaries residing in rural areas reported worse experiences getting appointments and care quickly than White FFS beneficiaries residing in urban areas. The difference between rural and urban White FFS beneficiaries was less than 3 points on a 0–100 scale.

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\* Significantly different from the score for urban residents of the same racial and ethnic group and coverage type ( $p < 0.05$ ).

For statistically significant differences between rural and urban residents of the same race or ethnicity and coverage type, the following symbols are also used when applicable:

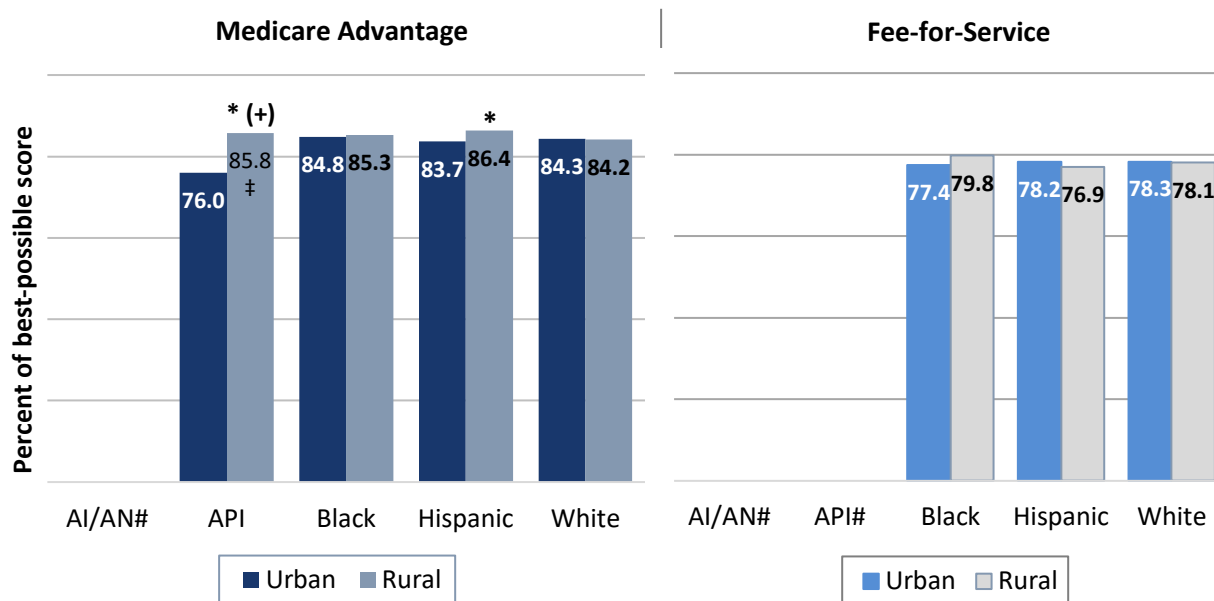
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

<sup>†</sup> This includes how often in the last six months patients got care that was needed right away, as well as how easy it was to get appointments for checkups and routine care.

## Patient Experience: Customer Service

Percentage of the best possible score (on a 0–100 scale) earned on three aspects of customer service,<sup>†</sup> by geography within racial and ethnic group, 2018



**SOURCE:** Data from the Medicare CAHPS survey, 2018.

**NOTES:** AI/AN = American Indian or Alaska Native. API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> This score is based on fewer than 400 completed measures, and thus its precision may be low.

<sup>‡</sup> There were not enough data from AI/AN MA beneficiaries, AI/AN FFS beneficiaries, or API FFS beneficiaries to make rural-urban comparisons on this measure.

### Disparities

- There were not enough data from AI/AN beneficiaries to make rural-urban comparisons on this measure.
- API MA beneficiaries residing in rural areas reported better experiences with customer service than API MA beneficiaries residing in urban areas. The difference between rural and urban Hispanic MA beneficiaries was greater than 3 points on a 0–100 scale. There were not enough data from API FFS beneficiaries to make a rural-urban comparison on this measure.
- In both MA and FFS, Black beneficiaries residing in rural areas reported experiences with customer service that were similar to the experiences reported by Black beneficiaries residing in urban areas.
- Hispanic MA beneficiaries residing in rural areas reported better experiences with customer service than Hispanic MA beneficiaries residing in urban areas. The difference between rural and urban Hispanic MA beneficiaries was less than 3 points on a 0–100 scale. Hispanic FFS beneficiaries residing in rural areas reported experiences with customer service that were similar to the experiences reported by Hispanic FFS beneficiaries residing in urban areas.

- In both MA and FFS, White beneficiaries residing in rural areas reported experiences with customer service that were similar to the experiences reported by White beneficiaries residing in urban areas.

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\* Significantly different from the score for urban residents of the same racial and ethnic group and coverage type ( $p < 0.05$ ).

For statistically significant differences between rural and urban residents of the same race or ethnicity and coverage type, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

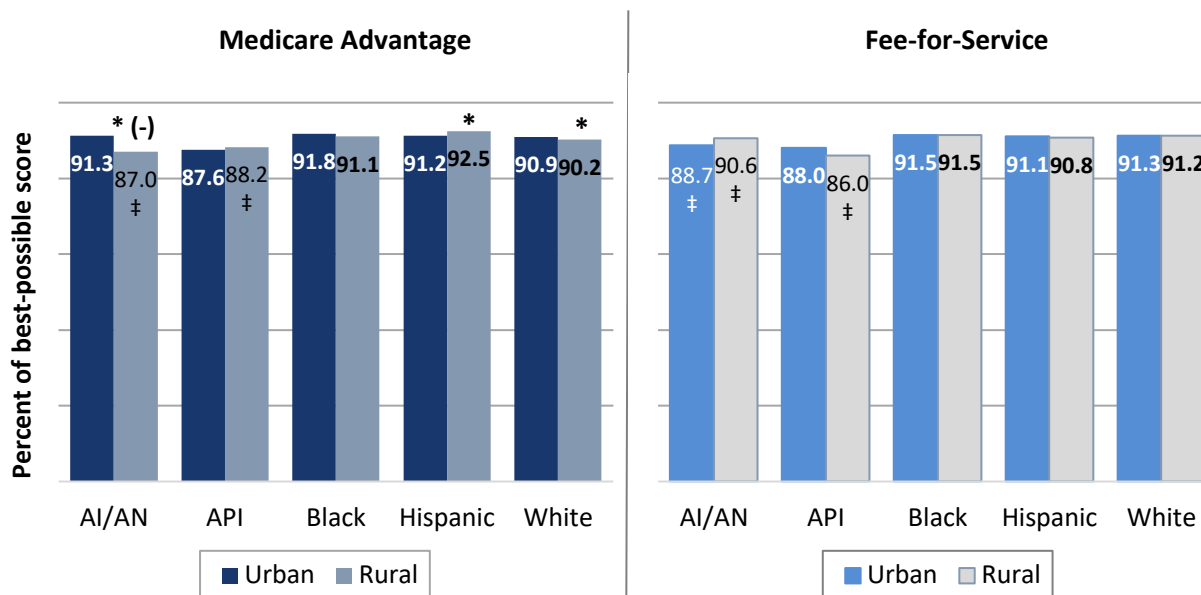
(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

<sup>†</sup> This includes how often in the last six months health plan customer service staff provided the information or help that beneficiaries needed, how often beneficiaries were treated with courtesy and respect, and how often forms from the health plan were easy to fill out.



## Patient Experience: Doctors Who Communicate Well

Percentage of the best possible score (on a 0–100 scale) earned on how well doctors communicate with patients,<sup>†</sup> by geography within racial and ethnic group, 2018



**SOURCE:** Data from the Medicare CAHPS survey, 2018.

**NOTE:** AI/AN = American Indian or Alaska Native. API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> This score is based on fewer than 400 completed measures, and thus its precision may be low.

### Disparities

- AI/AN MA beneficiaries residing in rural areas reported worse doctor communication than AI/AN MA beneficiaries residing in urban areas. The difference between rural and urban AI/AN MA beneficiaries was greater than 3 points on a 0–100 scale. AI/AN FFS beneficiaries residing in rural areas reported experiences with doctor communication that were similar to the experiences reported by AI/AN FFS beneficiaries residing in urban areas.
- In both MA and FFS, API beneficiaries residing in rural areas reported experiences with doctor communication that were similar to the experiences reported by API beneficiaries residing in urban areas.
- In both MA and FFS, Black beneficiaries residing in rural areas reported experiences with doctor communication that were similar to the experiences reported by Black beneficiaries residing in urban areas.
- Hispanic MA beneficiaries residing in rural areas reported better doctor communication than Hispanic MA beneficiaries residing in urban areas. The difference between rural and urban Hispanic MA beneficiaries was less than 3 points on a 0–100 scale. Hispanic FFS beneficiaries residing in rural areas reported experiences with doctor communication that were similar to the experiences reported by Hispanic FFS beneficiaries residing in urban areas.

- White MA beneficiaries residing in rural areas reported worse doctor communication than White MA beneficiaries residing in urban areas. The difference between rural and urban White MA beneficiaries was less than 3 points on a 0–100 scale. White FFS beneficiaries residing in rural areas reported experiences with doctor communication that were similar to the experiences reported by White FFS beneficiaries residing in urban areas.

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\* Significantly different from the score for urban residents of the same racial and ethnic group and coverage type ( $p < 0.05$ ).

For statistically significant differences between rural and urban residents of the same race or ethnicity and coverage type, the following symbols are also used when applicable:

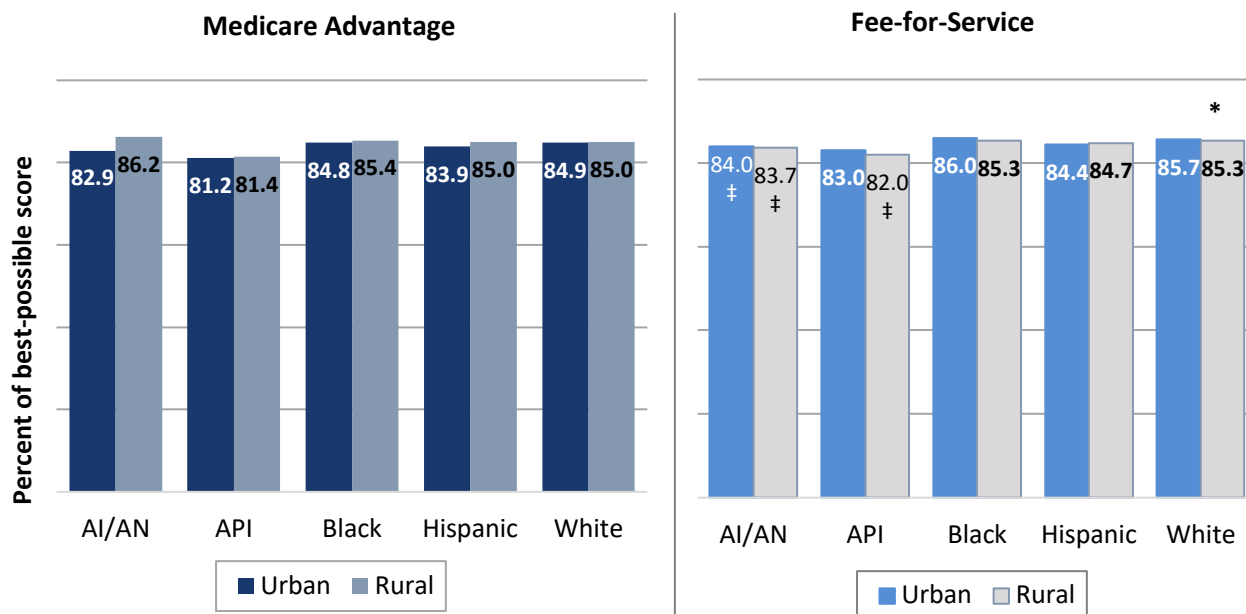
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

† This includes how often in the last six months doctors explained things in a way that was easy to understand, listened carefully, showed respect for what patients had to say, and spent time with patients.

## Patient Experience: Care Coordination

Percentage of the best possible score (on a 0–100 scale) earned on how well patient care was coordinated,<sup>†</sup> by geography within racial and ethnic group, 2018



**SOURCE:** Data from the Medicare CAHPS survey, 2018.

**NOTES:** American Indian or Alaska Native. API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> This score is based on fewer than 400 completed measures, and thus its precision may be low.

### Disparities

- In both MA and FFS, AI/AN beneficiaries residing in rural areas reported experiences with care coordination that were similar to the experiences reported by AI/AN beneficiaries residing in urban areas.
- In both MA and FFS, API beneficiaries residing in rural areas reported experiences with care coordination that were similar to the experiences reported by API beneficiaries residing in urban areas.
- In both MA and FFS, Black beneficiaries residing in rural areas reported experiences with care coordination that were similar to the experiences reported by Black beneficiaries residing in urban areas.
- In both MA and FFS, Hispanic beneficiaries residing in rural areas reported experiences with care coordination that were similar to the experiences reported by Black beneficiaries residing in urban areas.
- White MA beneficiaries residing in rural areas reported experiences with care coordination that were similar to the experiences reported by White MA beneficiaries residing in urban areas. White FFS beneficiaries residing in rural areas reported worse experiences with care

coordination than White FFS beneficiaries residing in urban areas. The difference between rural and urban White FFS beneficiaries was less than 3 points on a 0–100 scale.

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\* Significantly different from the score for urban residents of the same racial and ethnic group and coverage type ( $p < 0.05$ ).

For statistically significant differences between rural and urban residents of the same race or ethnicity and coverage type, the following symbols are also used when applicable:

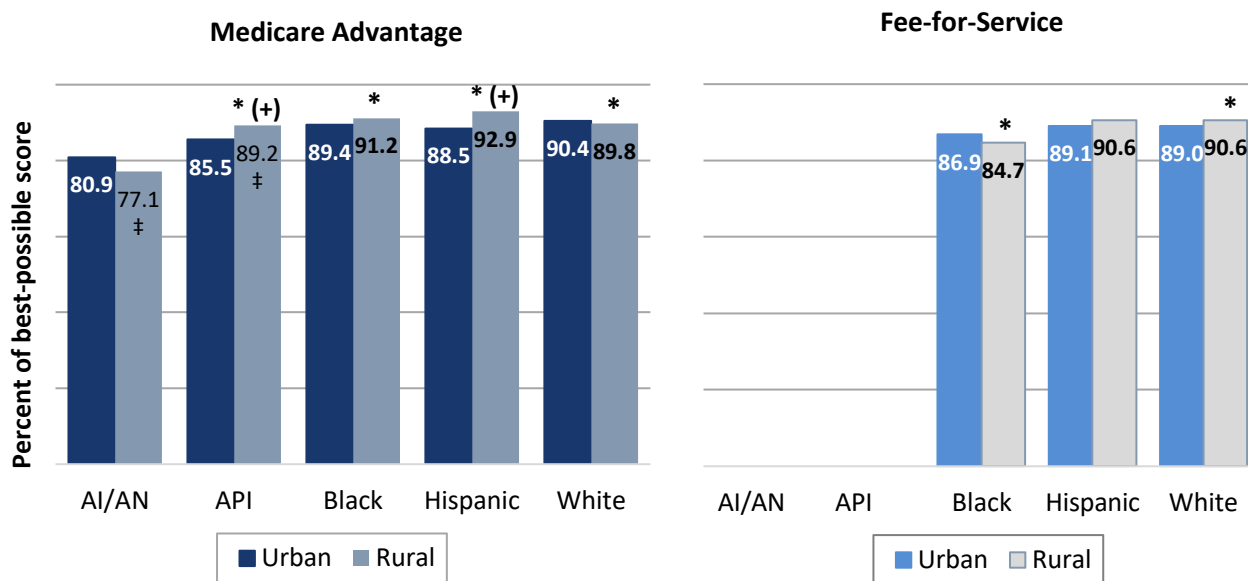
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

<sup>†</sup> This includes how often in the last six months doctors had medical records and other information about patients' care at patients' scheduled appointments and how quickly patients received their test results.

## Patient Experience: Getting Needed Prescription Drugs

Percentage of the best possible score (on a 0–100 scale) earned on how easy it is for beneficiaries to get the prescription drugs they need using their plans,<sup>†</sup> by geography within racial and ethnic group, 2018



**SOURCE:** Data from the Medicare CAHPS survey, 2018.

**NOTES:** AI/AN = American Indian or Alaska Native. API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> This score is based on fewer than 400 completed measures, and thus its precision may be low.

<sup>#</sup> There were not enough data from AI/AN FFS beneficiaries or API FFS beneficiaries to make rural-urban comparisons on this measure.

### Disparities

- AI/AN MA beneficiaries residing in rural areas reported experiences getting needed prescription drugs that were similar to the experiences reported by AI/AN MA beneficiaries residing in urban areas. There were not enough data from AI/AN FFS beneficiaries to make a rural-urban comparison on this measure.
- API MA beneficiaries residing in rural areas reported better experiences getting needed prescription drugs than API MA beneficiaries residing in urban areas. The difference between rural and urban API MA beneficiaries was greater than 3 points on a 0–100 scale. There were not enough data from API FFS beneficiaries to make a rural-urban comparison on this measure.
- Black MA beneficiaries residing in rural areas reported better experiences getting needed prescription drugs than Black MA beneficiaries residing in urban areas. The difference between rural and urban Black MA beneficiaries was less than 3 points on a 0–100 scale. Black FFS beneficiaries residing in rural areas reported worse experiences getting needed prescription drugs than Black FFS beneficiaries residing in urban areas. The difference between rural and urban Black FFS beneficiaries was less than 3 points on a 0–100 scale.



- Hispanic MA beneficiaries residing in rural areas reported better experiences getting needed prescription drugs than Hispanic beneficiaries residing in urban areas. The difference between rural and urban Hispanic MA beneficiaries was greater than 3 points on a 0–100 scale. Hispanic FFS beneficiaries residing in rural areas reported experiences getting needed prescription drugs that were similar to the experiences reported by Hispanic FFS beneficiaries residing in urban areas.
- White MA beneficiaries residing in rural areas reported worse experiences getting needed prescription drugs than White MA beneficiaries residing in urban areas. White FFS beneficiaries residing in rural areas reported better experiences getting needed prescription drugs than White FFS beneficiaries residing in urban areas. In each case, the difference was less than 3 points on a 0–100 scale.

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\* Significantly different from the score for urban residents of the same racial and ethnic group and coverage type ( $p < 0.05$ ).

For statistically significant differences between rural and urban residents of the same race or ethnicity and coverage type, the following symbols are also used when applicable:

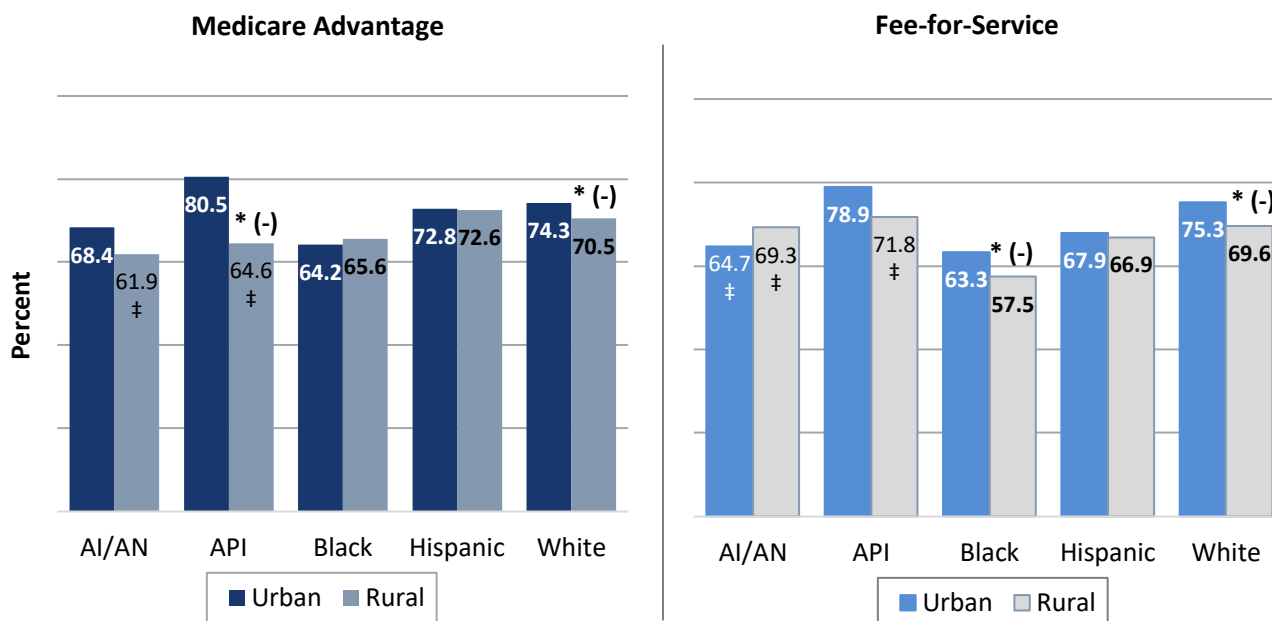
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

<sup>†</sup> This includes how often in the last six months it was easy to use the plan to get prescribed medications and how easy it was to fill prescriptions at a pharmacy or by mail.

## Patient Experience: Annual Flu Vaccine

Percentage of Medicare enrollees who got a vaccine (flu shot), by geography within racial and ethnic group, 2018



**SOURCE:** Data from the Medicare CAHPS survey, 2018.

**NOTES:** American Indian or Alaska Native. API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

\* This score is based on fewer than 400 completed measures, and thus its precision may be low.

### Disparities

- In both MA and FFS, AI/AN beneficiaries residing in rural areas were about as likely as AI/AN beneficiaries residing in urban areas to have received the flu vaccine.
- API MA beneficiaries residing in rural areas were less likely than API MA beneficiaries residing in urban areas to have received the flu vaccine. The difference between rural and urban API MA beneficiaries was greater than 3 percentage points. API FFS beneficiaries residing in rural areas were about as likely as API FFS beneficiaries residing in urban areas to have received the flu vaccine.
- Black MA beneficiaries residing in rural areas were about as likely as Black MA beneficiaries residing in urban areas to have received the flu vaccine. Black FFS beneficiaries residing in rural areas were less likely than Black FFS beneficiaries residing in urban areas to have received the flu vaccine. The difference between rural and urban Black FFS beneficiaries was greater than 3 percentage points.
- In both MA and FFS, Hispanic beneficiaries residing in rural areas were about as likely as Hispanic beneficiaries residing in urban areas to have received the flu vaccine.

- In both MA and FFS, White beneficiaries residing in rural areas were less likely than White beneficiaries residing in urban areas to have received the flu vaccine. In each case, the difference between rural and urban White beneficiaries was greater than 3 percentage points.

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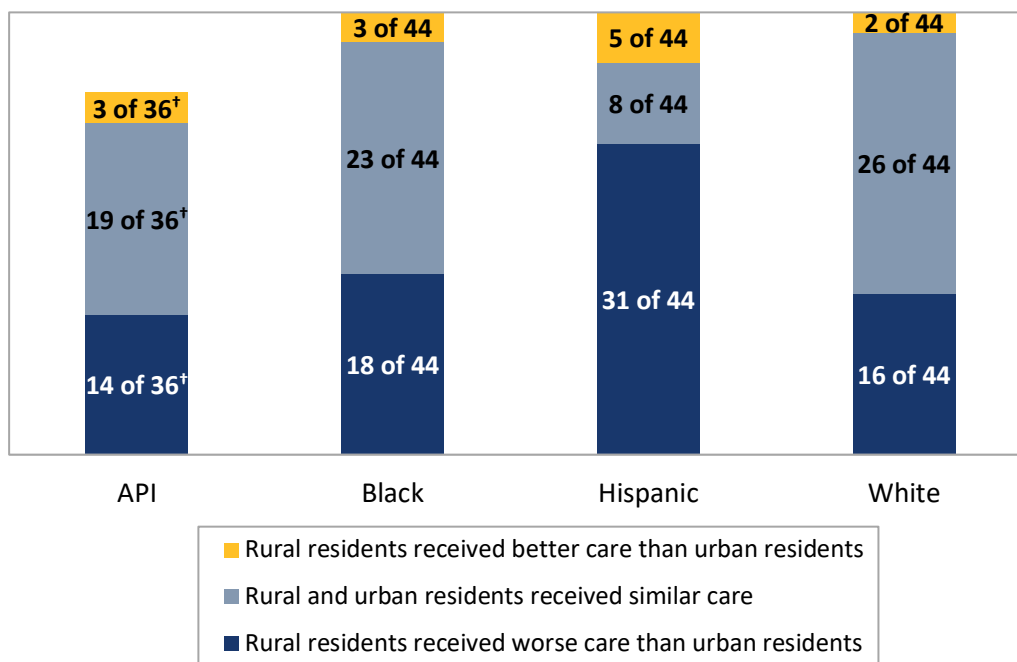
\* Significantly different from the score for urban residents of the same racial and ethnic group and coverage type ( $p < 0.05$ ).

For statistically significant differences between rural and urban residents of the same race or ethnicity and coverage type, the following symbols are also used when applicable:

- (+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.
- (-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

## Rural-Urban Disparities in Care by Racial and Ethnic Group: All Clinical Care Measures

Number of clinical care measures for which rural Asian and Pacific Islander (API), Black, Hispanic, and White MA beneficiaries experienced care that was worse than, similar to, or better than the care experienced by urban API, Black, Hispanic, and White MA beneficiaries in 2018



**SOURCE:** This chart summarizes clinical quality (HEDIS) data collected in 2018 from MA plans nationwide.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> There were only enough data from rural API beneficiaries to make rural-urban comparisons on 36 of the 44 clinical care measures.

Within each racial or ethnic group, the relative difference between rural and urban residents is used to assess disparities.

- **Better** = Rural residents received better care than urban residents. Differences are statistically significant ( $p < 0.05$ ), are equal to or larger than 3 points<sup>‡</sup> on a 0–100 scale, and favor rural residents.
- **Similar** = Rural and urban residents received care of similar quality. Differences are less than 3 points on a 0–100 scale and/or not statistically significant.
- **Worse** = Rural residents received worse care than urban residents. Differences are statistically significant, are equal to or larger than 3 points on a 0–100 scale, and favor urban residents.

<sup>‡</sup> A difference that is considered to be of moderate magnitude (Paddison et al., 2013).

**Rural Asians and Pacific Islanders received worse care than urban Asians and Pacific Islanders**

- Breast cancer screening
- Colorectal cancer screening
- Testing to confirm COPD
- Pharmacotherapy management of COPD exacerbation—use of systemic corticosteroid
- Pharmacotherapy management of COPD exacerbation—use of bronchodilators
- Diabetes care—eye exam
- Diabetes care—blood pressure controlled
- Diabetes care—blood sugar controlled
- Statin use in patients with diabetes
- Medication adherence for diabetes—statins
- Antidepressant medication management—acute phase treatment
- Antidepressant medication management—continuation phase treatment
- Medication reconciliation after hospital discharge
- Follow-up after emergency department visit for people with high-risk multiple chronic conditions

**Rural Asians and Pacific Islanders received better care than urban Asians and Pacific Islanders**

- Initiation of alcohol and other drug dependence treatment
- Transitions of care—patient engagement after inpatient discharge
- Avoiding use of opioids from multiple prescribers and pharmacies

**Rural Blacks received worse care than urban Blacks**

- Colorectal cancer screening
- Testing to confirm COPD
- Pharmacotherapy management of COPD exacerbation—use of bronchodilators
- Continuous beta-blocker treatment after a heart attack
- Diabetes care—eye exam
- Diabetes care—blood pressure controlled
- Diabetes care—blood sugar controlled
- Medication adherence for diabetes—statins
- Osteoporosis management in women who had a fracture
- Antidepressant medication management—acute phase treatment
- Antidepressant medication management—continuation phase treatment
- Follow-up after hospital stay for mental illness (within seven days of discharge)
- Follow-up after emergency department visit for mental illness (within seven days of discharge)
- Follow-up after emergency department visit for mental illness (within 30 days of discharge)
- Follow-up after emergency department visit for alcohol and other drug abuse or dependence (within 30 days of discharge)
- Avoiding potentially harmful drug-disease interactions in elderly patients with dementia
- Avoiding potentially harmful drug-disease interactions in elderly patients with a history of falls
- Avoiding use of high-risk medication in the elderly



**Rural Blacks received better care than urban Blacks**

- Avoiding use of opioids from multiple prescribers
- Avoiding use of opioids from multiple pharmacies
- Avoiding use of opioids from multiple prescribers and pharmacies

**Rural Hispanics received worse care than urban Hispanics**

- Adult body mass index assessment
- Colorectal cancer screening
- Testing to confirm COPD
- Pharmacotherapy management of COPD exacerbation—use of systemic corticosteroid
- Pharmacotherapy management of COPD exacerbation—use of bronchodilators
- Controlling high blood pressure
- Continuous beta-blocker treatment after a heart attack
- Statin use in patients with cardiovascular disease
- Medication adherence for cardiovascular disease—statins
- Diabetes care—blood sugar testing
- Diabetes care—eye exam
- Diabetes care—blood pressure controlled
- Diabetes care—blood sugar controlled
- Statin use in patients with diabetes
- Medication adherence for diabetes—statins
- Antidepressant medication management—acute phase treatment
- Antidepressant medication management—continuation phase treatment
- Follow-up after emergency department visit for mental illness (within seven days of discharge)
- Follow-up after emergency department visit for alcohol and other drug abuse or dependence (within seven days of discharge)
- Follow-up after emergency department visit for alcohol and other drug abuse or dependence (within 30 days of discharge)
- Initiation of alcohol and other drug dependence treatment
- Medication reconciliation after hospital discharge
- Transitions of care—notification of inpatient admission
- Transitions of care—receipt of discharge information
- Transitions of care—patient engagement after inpatient discharge
- Transitions of care—medication reconciliation after inpatient discharge
- Follow-up after emergency department visit for people with high-risk multiple chronic conditions
- Avoiding potentially harmful drug-disease interactions in elderly patients with chronic renal failure
- Avoiding potentially harmful drug-disease interactions in elderly patients with dementia
- Avoiding potentially harmful drug-disease interactions in elderly patients with a history of falls
- Avoiding use of opioids from multiple pharmacies

**Rural Hispanics received better care than urban Hispanics**

- Follow-up after hospital stay for mental illness (within seven days of discharge)
- Follow-up after hospital stay for mental illness (within 30 days of discharge)
- Avoiding use of opioids at high dosage
- Avoiding use of opioids from multiple prescribers
- Avoiding use of opioids from multiple prescribers and pharmacies

#### **Rural Whites received worse care than urban Whites**

- Breast cancer screening
- Colorectal cancer screening
- Testing to confirm COPD
- Diabetes care—eye exam
- Diabetes care—blood pressure controlled
- Diabetes care—blood sugar controlled
- Statin use in patients with diabetes
- Medication adherence for diabetes—statins
- Osteoporosis management in women who had a fracture
- Antidepressant medication management—acute phase treatment
- Follow-up after hospital stay for mental illness (within seven days of discharge)
- Follow-up after emergency department visit for mental illness (within seven days of discharge)
- Medication reconciliation after hospital discharge
- Transitions of care—medication reconciliation after inpatient discharge
- Avoiding potentially harmful drug-disease interactions in elderly patients with dementia
- Avoiding potentially harmful drug-disease interactions in elderly patients with a history of falls

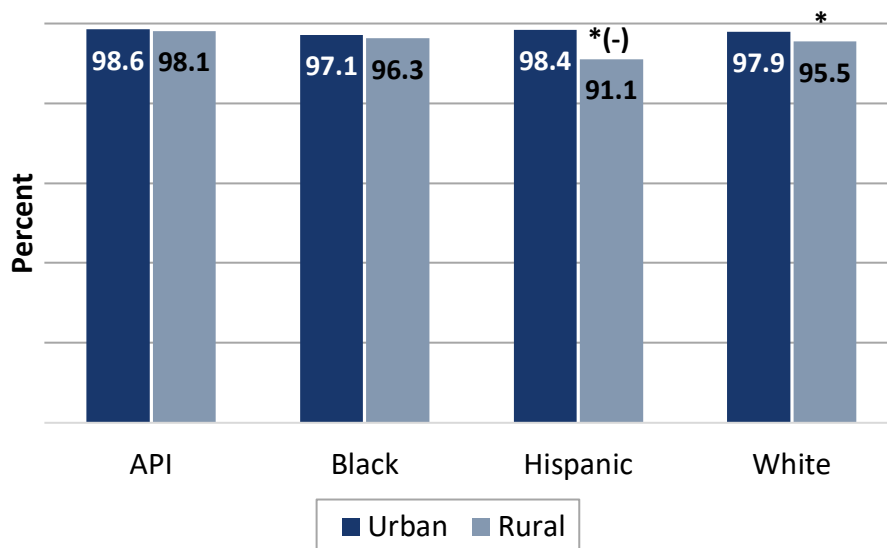
#### **Rural Whites received better care than urban Whites**

- Initiation of alcohol and other drug dependence treatment
- Avoiding use of opioids from multiple prescribers

## Clinical Care: Prevention and Screening

### Adult BMI Assessment

Percentage of MA enrollees aged 18 to 74 years who had an outpatient visit whose body mass index (BMI) was documented in the past two years, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Among API and Black beneficiaries, rural residents were about as likely as urban residents to have had their BMIs documented. Among Hispanic and White beneficiaries, rural residents were less likely than urban residents to have had their BMIs documented. For Hispanic beneficiaries, the difference between rural and urban residents was greater than 3 percentage points. For White beneficiaries, the difference between rural and urban residents was less than 3 percentage points.

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\* Significantly different from the score for urban residents of the same racial and ethnic group ( $p < 0.05$ ).

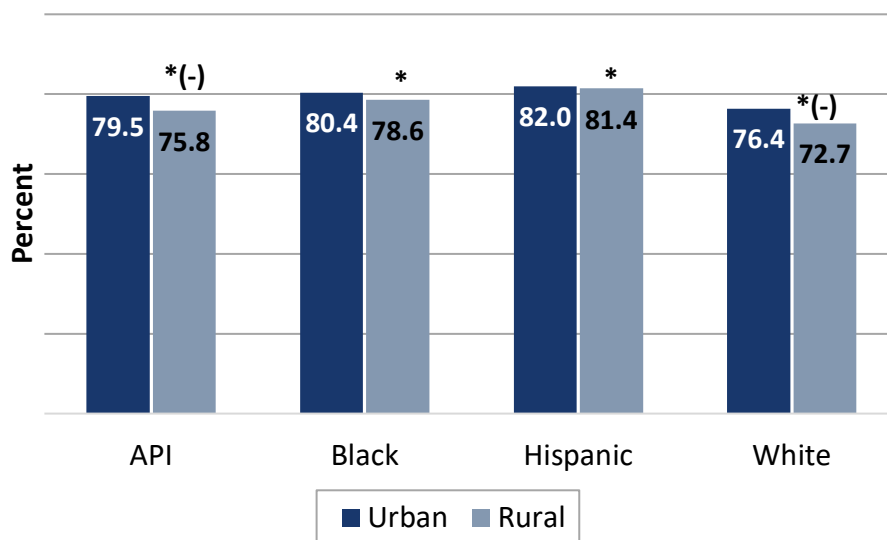
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

## Breast Cancer Screening

Percentage of MA enrollees (women) aged 50 to 74 years who had appropriate screening for breast cancer, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Among API, Black, Hispanic, and White women, rural residents were less likely than urban residents to have been appropriately screened for breast cancer. The difference between rural and urban API women was greater than 3 percentage points, as was the difference between rural and urban White women. The difference between rural and urban Black women was less than 3 percentage points, as was the difference between rural and urban Hispanic women.

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\* Significantly different from the score for urban residents of the same racial and ethnic group ( $p < 0.05$ ).

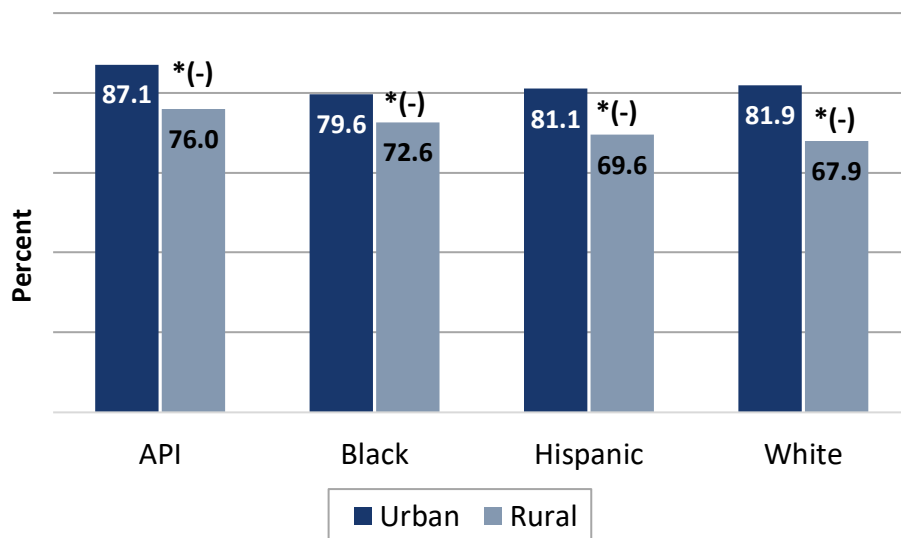
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

## Colorectal Cancer Screening

Percentage of MA enrollees aged 50 to 75 years who had appropriate screening for colorectal cancer, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Among API, Black, Hispanic, and White beneficiaries, rural residents were less likely than urban residents to have been appropriately screened for colorectal cancer. For each of these racial and ethnic groups, the difference between rural and urban residents was greater than 3 percentage points.

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\* Significantly different from the score for urban residents of the same racial and ethnic group ( $p < 0.05$ ).

For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

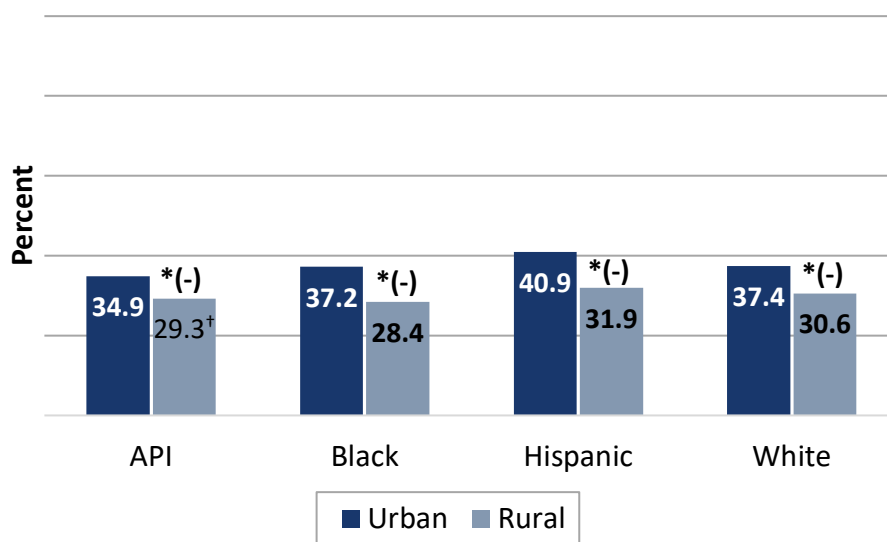
- (+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.
- (-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.



## Clinical Care: Respiratory Conditions

### Testing to Confirm COPD

Percentage of MA enrollees aged 40 years and older with a new diagnosis of chronic obstructive pulmonary disease (COPD) or newly active COPD who received appropriate spirometry testing to confirm the diagnosis, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> This score is based on fewer than 400 completed measures, and thus its precision may be low.

### Disparities

- Among API, Black, Hispanic, and White beneficiaries, rural residents with a new diagnosis of COPD or newly active COPD were less likely than urban residents with a new diagnosis of COPD or newly active COPD to have received a spirometry test to confirm the diagnosis. For each of these racial and ethnic groups, the difference between rural and urban residents was greater than 3 percentage points.

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\* Significantly different from the score for urban residents of the same racial and ethnic group ( $p < 0.05$ ).

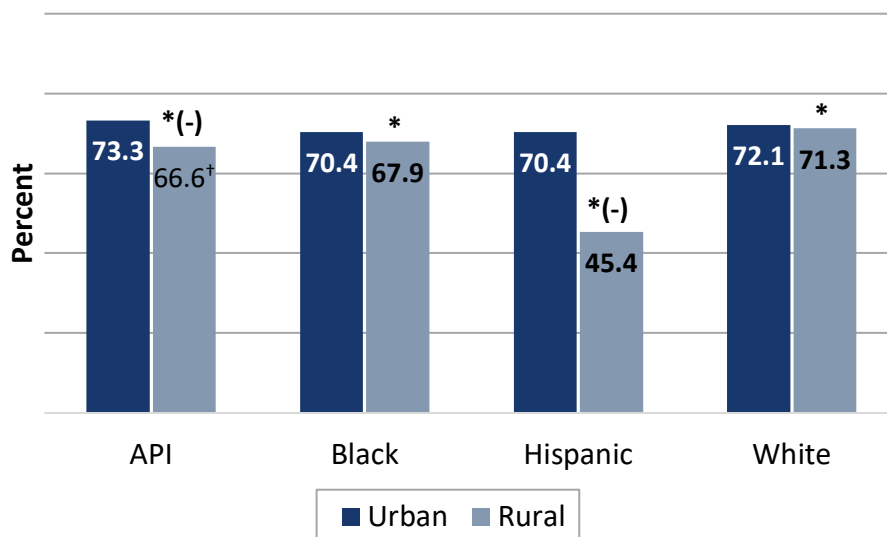
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

## Clinical Care: Pharmacotherapy Management of COPD Exacerbation—Systemic Corticosteroid

Percentage of MA enrollees aged 40 years and older who had an acute inpatient discharge or emergency department encounter for COPD exacerbation in the past year who were dispensed a systemic corticosteroid within 14 days of the event, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> This score is based on fewer than 400 completed measures, and thus its precision may be low.

### Disparities

- Among API, Black, Hispanic, and White beneficiaries, rural residents who experienced a COPD exacerbation were less likely than urban residents who experienced a COPD exacerbation to have been dispensed a systemic corticosteroid within 14 days of the event. The difference between rural and urban APIs was greater than 3 percentage points, as was the difference between rural and urban Hispanics. The difference between rural and urban Blacks was less than 3 percentage points, as was the difference between rural and urban Whites.

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\* Significantly different from the score for urban residents of the same racial and ethnic group ( $p < 0.05$ ).

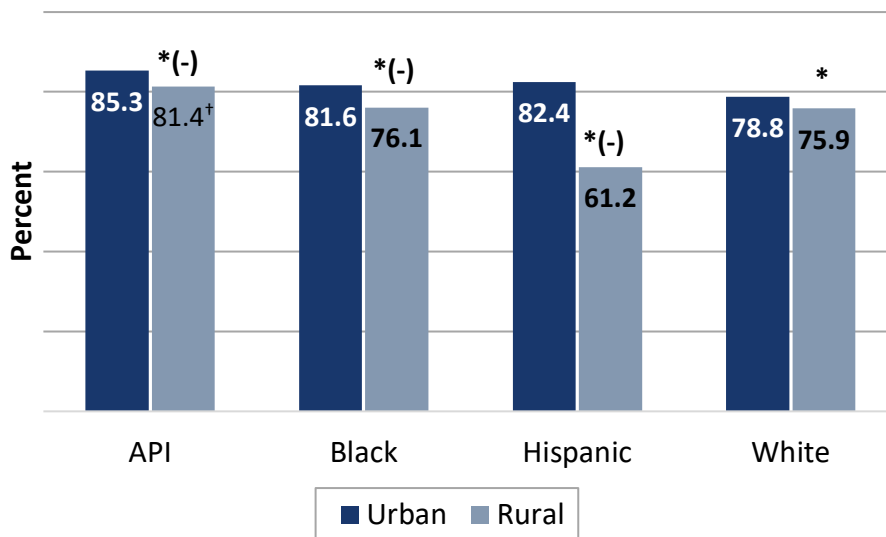
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

## Clinical Care: Pharmacotherapy Management of COPD Exacerbation—Bronchodilator

Percentage of MA enrollees aged 40 years and older who had an acute inpatient discharge or emergency department encounter for COPD exacerbation in the past year who were dispensed a bronchodilator within 30 days of experiencing the event, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> This score is based on fewer than 400 completed measures, and thus its precision may be low.

### Disparities

- Among API, Black, Hispanic, and White beneficiaries, rural residents who experienced a COPD exacerbation were less likely than urban residents who experienced a COPD exacerbation to have been dispensed a bronchodilator within 30 days of the event. For API, Black, and Hispanic beneficiaries, the difference between rural and urban residents was greater than 3 percentage points. For White beneficiaries, the difference between rural and urban residents was less than 3 percentage points.

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\* Significantly different from the score for urban residents of the same racial and ethnic group ( $p < 0.05$ ).

For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

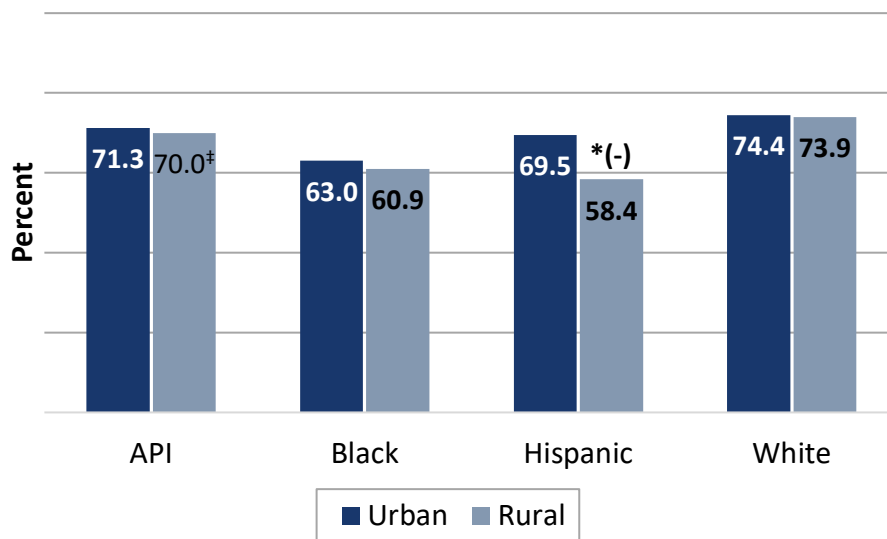
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

## Clinical Care: Cardiovascular Conditions

### Controlling High Blood Pressure

Percentage of MA enrollees aged 18 to 85 years who had a diagnosis of hypertension whose blood pressure was adequately controlled<sup>†</sup> during the past year, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> This score is based on fewer than 400 completed measures, and thus its precision may be low.

### Disparities

- Among API, Black, and White beneficiaries, rural residents with a diagnosis of hypertension were about as likely as urban residents with a diagnosis of hypertension to have had their blood pressure adequately controlled.
- Rural Hispanics with a diagnosis of hypertension were less likely than urban Hispanics with a diagnosis of hypertension to have had their blood pressure adequately controlled. The difference between rural and urban Hispanics was greater than 3 percentage points.

\* Significantly different from the score for urban residents of the same racial and ethnic group ( $p < 0.05$ ).

For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

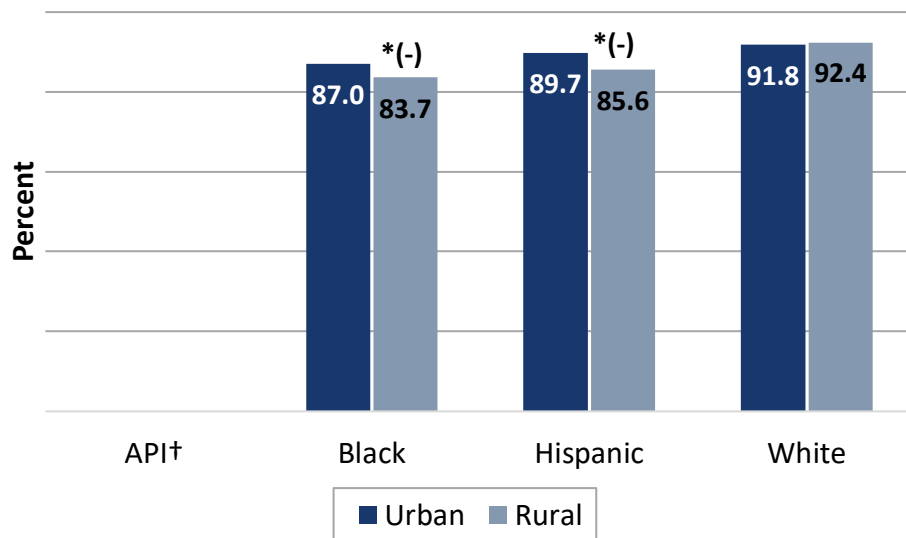
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

<sup>†</sup> Less than 140/90 for enrollees 18 to 59 years of age and for enrollees 60 to 85 years of age with a diagnosis of diabetes, or less than 150/90 for members 60 to 85 years of age without a diagnosis of diabetes.

### Continuous Beta-Blocker Treatment

Percentage of MA enrollees aged 18 years and older who were hospitalized and discharged alive with a diagnosis of acute myocardial infarction (AMI) who received persistent beta-blocker treatment for six months after discharge, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

† There were not enough data from API beneficiaries to make a rural-urban comparison on this measure.

#### Disparities

- Among Black and Hispanic beneficiaries, rural residents who were hospitalized for a heart attack were less likely than urban residents who were hospitalized for a heart attack to have received persistent beta-blocker treatment. The difference between rural and urban Blacks was greater than 3 percentage points, as was the difference between rural and urban Hispanics.
- Rural Whites who were hospitalized for a heart attack were about as likely as urban Whites who were hospitalized for a heart attack to have received persistent beta-blocker treatment.

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\* Significantly different from the score for urban residents of the same racial and ethnic group ( $p < 0.05$ ).

For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

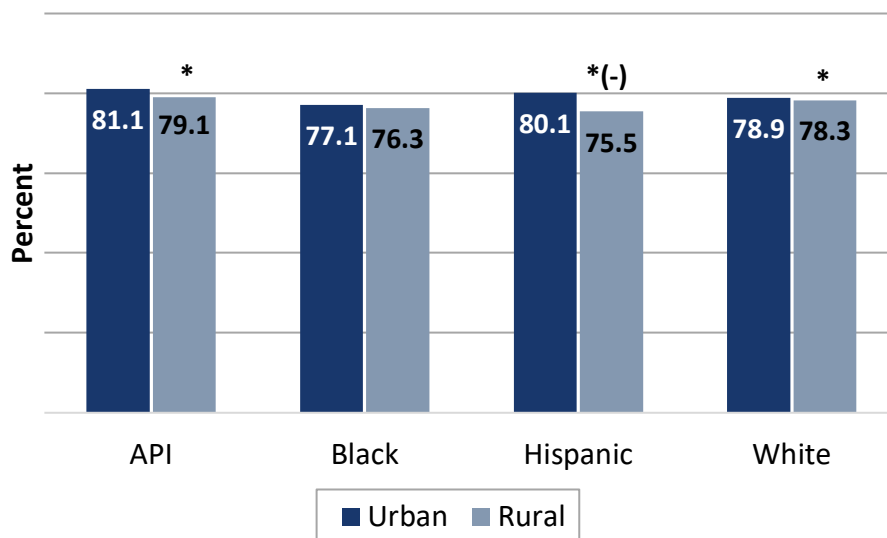
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.



## Statin Use in Patients with Cardiovascular Disease

Percentage of male MA enrollees aged 21 to 75 years and female MA enrollees aged 40 to 75 years with clinical atherosclerotic cardiovascular disease (ASCVD) who received statin therapy, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Among API, Hispanic, and White beneficiaries, rural residents with ASCVD were less likely than urban residents with ASCVD to have received statin therapy. The difference between rural and urban APIs was less than 3 percentage points, as was the difference between rural and urban Whites. The difference between rural and urban Hispanics was greater than 3 percentage points.
- Rural Blacks with ASCVD were about as likely as urban Blacks with ASCVD to have received statin therapy.

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\* Significantly different from the score for urban residents of the same racial and ethnic group ( $p < 0.05$ ).

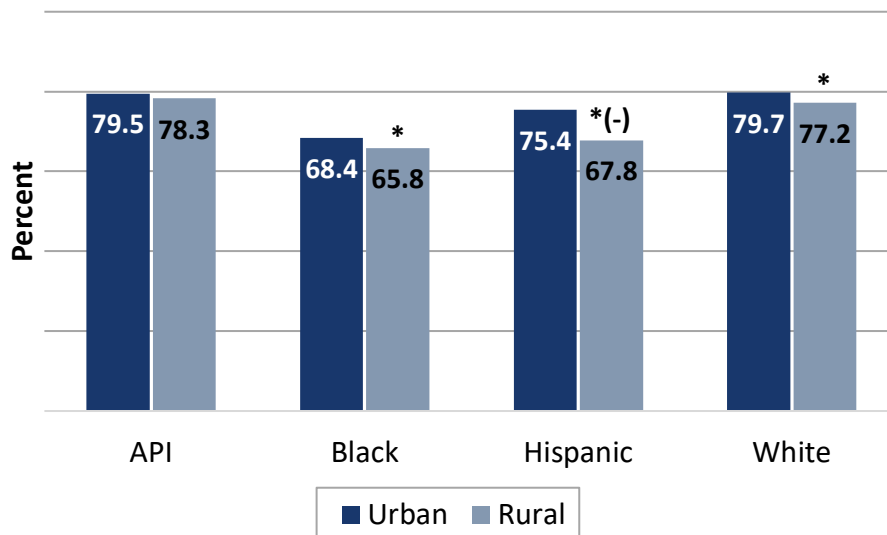
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

## Medication Adherence for Cardiovascular Disease—Statins

Percentage of male MA enrollees aged 21 to 75 years and female MA enrollees aged 40 to 75 years with clinical atherosclerotic cardiovascular disease (ASCVD) who were dispensed a statin medication during the measurement year who remained on the medication for at least 80 percent of the treatment period, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Rural APIs with ASCVD were about as likely as urban APIs with ASCVD to have had proper statin medication adherence.
- Among Black, Hispanic, and White beneficiaries, rural residents with ASCVD were less likely than urban residents with ASCVD to have had proper statin medication adherence. The difference between rural and urban Blacks was less than 3 percentage points, as was the difference between rural and urban Whites. The difference between rural and urban Hispanics was greater than 3 percentage points.

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\* Significantly different from the score for urban residents of the same racial and ethnic group ( $p < 0.05$ ).

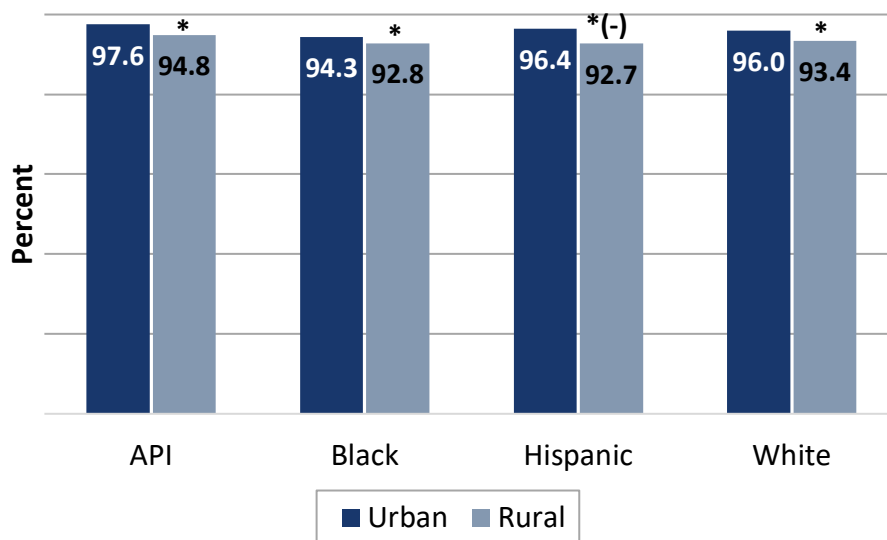
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

- (+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.
- (-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

## Clinical Care: Diabetes

### Diabetes Care—Blood Sugar Testing

Percentage of Medicare Advantage enrollees aged 18 to 75 years with diabetes (type 1 and type 2) who had one or more HbA1c tests in the past year, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Among API, Black, Hispanic, and White beneficiaries, rural residents with diabetes were less likely than urban residents with diabetes to have had their blood sugar tested at least once in the past year. The difference between rural and urban APIs was less than 3 percentage points, as were the differences between rural and urban Blacks and rural and urban Whites. The difference between rural and urban Hispanics was greater than 3 percentage points.

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\* Significantly different from the score for urban residents of the same racial and ethnic group ( $p < 0.05$ ).

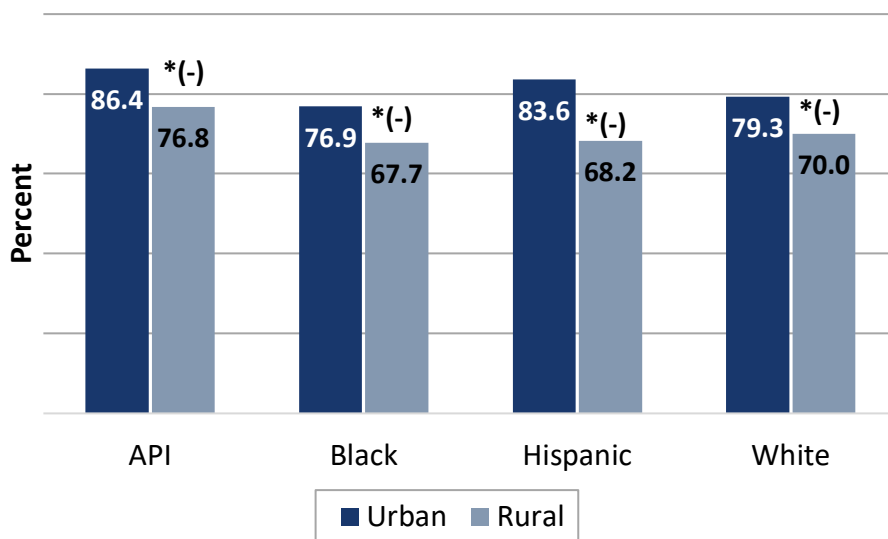
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

### Diabetes Care—Eye Exam

Percentage of MA enrollees aged 18 to 75 years with diabetes (type 1 and type 2) who had an eye exam (retinal) in the past year, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

#### Disparities

- Among API, Black, Hispanic, and White beneficiaries, rural residents with diabetes were less likely than urban residents with diabetes to have had an eye exam in the past year. For each of these racial and ethnic groups, the difference between rural and urban residents was greater than 3 percentage points.

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\* Significantly different from the score for urban residents of the same racial and ethnic group ( $p < 0.05$ ).

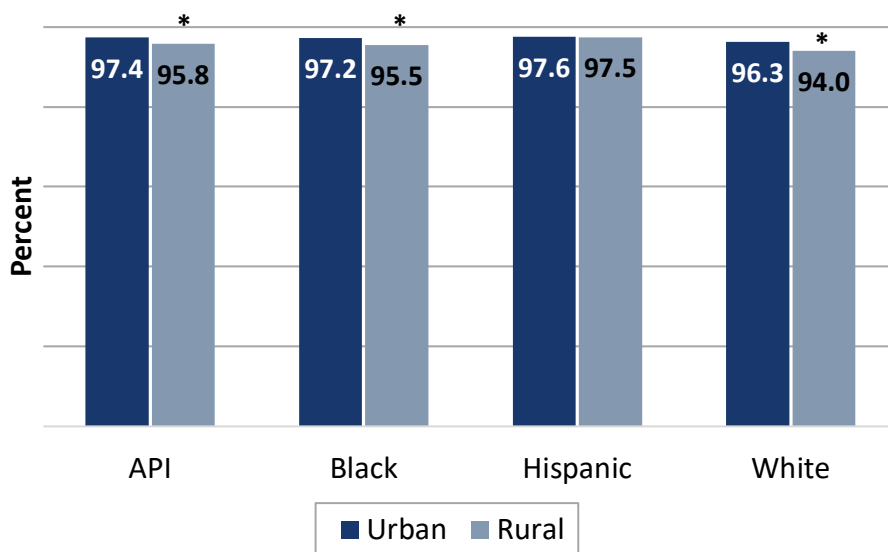
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

### Diabetes Care—Kidney Disease Monitoring

Percentage of MA enrollees aged 18 to 75 years with diabetes (type 1 and type 2) who had medical attention for nephropathy in the past year, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

#### Disparities

- Among API, Black, and White beneficiaries, rural residents with diabetes were less likely than urban residents with diabetes to have had medical attention for nephropathy in the past year. For each of these groups, the difference between rural and urban residents was less than 3 percentage points.
- Rural Hispanics with diabetes were about as likely as urban Hispanics with diabetes to have had medical attention for nephropathy in the past year.

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\* Significantly different from the score for urban residents of the same racial and ethnic group ( $p < 0.05$ ).

For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

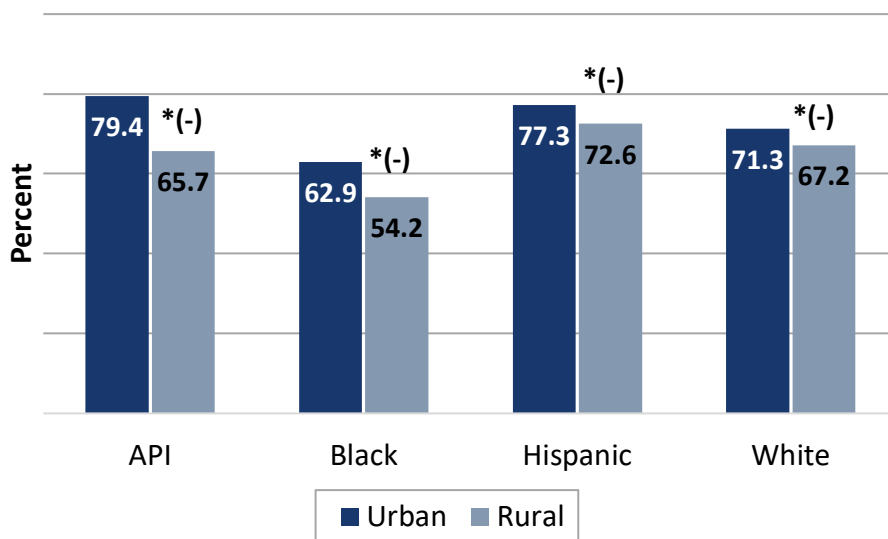
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.



## Diabetes Care—Blood Pressure Controlled

Percentage of MA enrollees aged 18 to 75 years with diabetes (type 1 and type 2) whose most recent blood pressure was less than 140/90, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Among API, Black, Hispanic and White beneficiaries, rural residents with diabetes were less likely than urban residents with diabetes to have their blood pressure under control. For each of these racial and ethnic groups, difference between rural and urban residents was greater than 3 percentage points.

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\* Significantly different from the score for urban residents of the same racial and ethnic group ( $p < 0.05$ ).

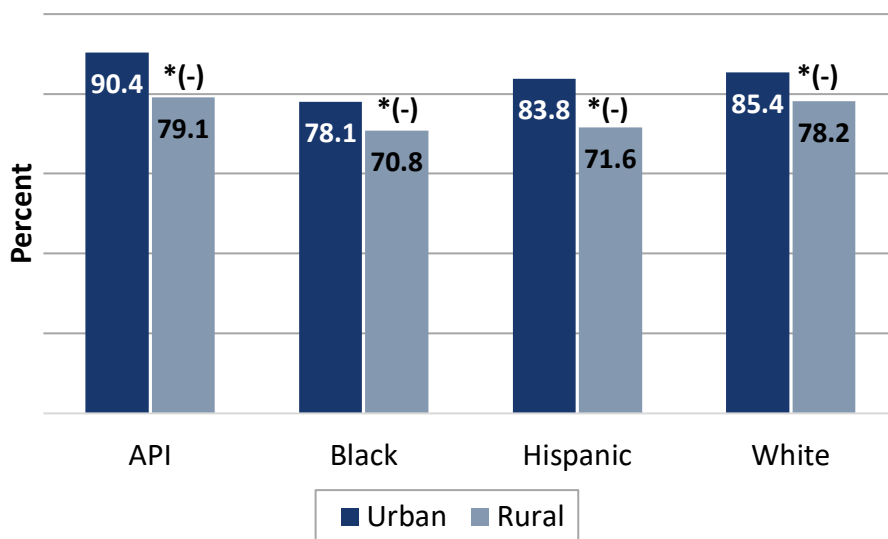
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

## Diabetes Care—Blood Sugar Controlled

Percentage of MA enrollees aged 18 to 75 years with diabetes (type 1 and type 2) whose most recent HbA1c level was 9 percent or less, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Among API, Black, Hispanic and White beneficiaries, rural residents with diabetes were less likely than urban residents with diabetes to have their blood sugar levels under control. For each of these racial and ethnic groups, difference between rural and urban residents was greater than 3 percentage points.

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\* Significantly different from the score for urban residents of the same racial and ethnic group ( $p < 0.05$ ).

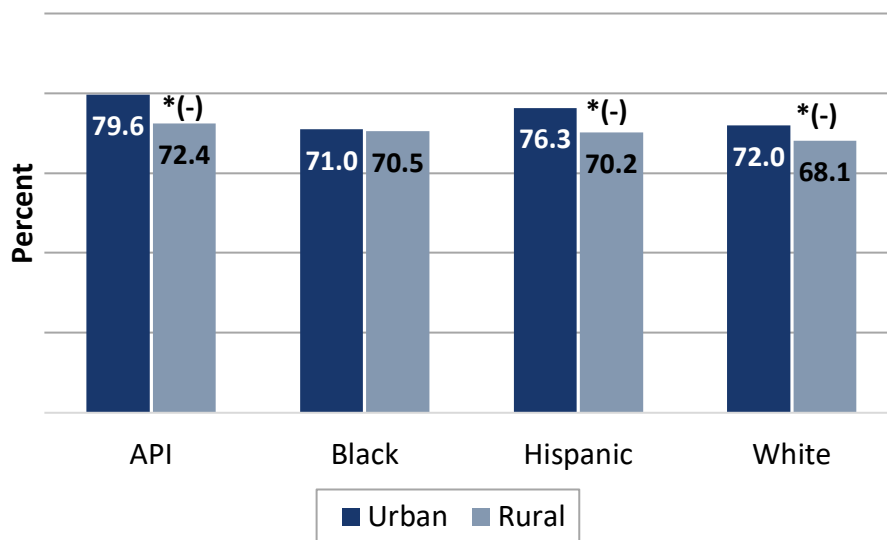
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

### Statin Use in Patients with Diabetes

Percentage of MA enrollees aged 40 to 75 years with diabetes (type 1 and type 2)<sup>†</sup> who received statin therapy, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

#### Disparities

- Among API, Hispanic, and White beneficiaries, rural residents with diabetes were less likely than urban residents with diabetes to have received statin therapy. For each of these racial and ethnic groups, the difference between rural and urban residents was greater than 3 percentage points.
- Rural Blacks with diabetes were about as likely as urban Blacks with diabetes to have received statin therapy.

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\* Significantly different from the score for urban residents of the same racial and ethnic group ( $p < 0.05$ ).

For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

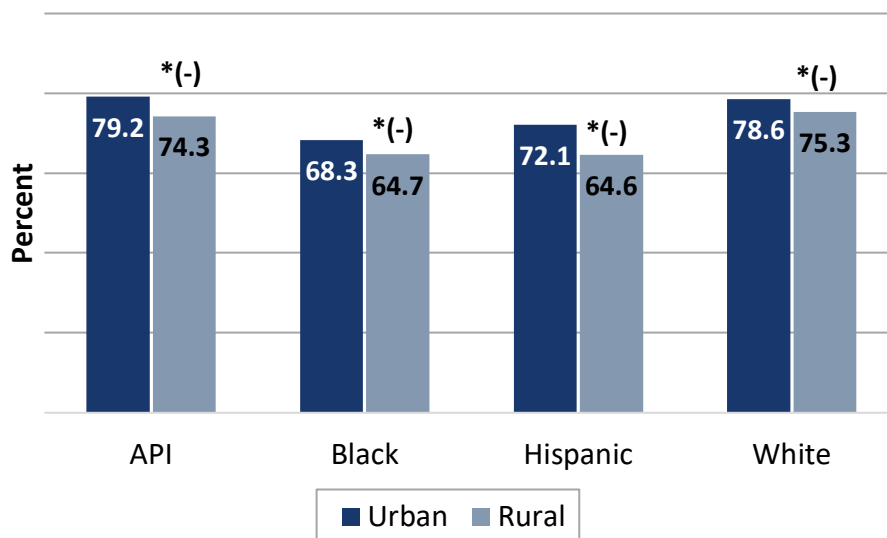
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

<sup>†</sup> Excludes those who also have clinical atherosclerotic cardiovascular disease.

## Medication Adherence for Diabetes—Statins

Percentage of MA enrollees aged 40 to 75 years with diabetes (type 1 and type 2)<sup>†</sup> who were dispensed a statin medication during the measurement year who remained on the medication for at least 80 percent of the treatment period, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Among API, Black, Hispanic, and White beneficiaries, rural residents with diabetes were less likely than urban residents with diabetes to have had proper statin medication adherence. For each of these racial and ethnic groups, the difference between rural and urban residents was greater than 3 percentage points.

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\* Significantly different from the score for urban residents of the same racial and ethnic group ( $p < 0.05$ ).

For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

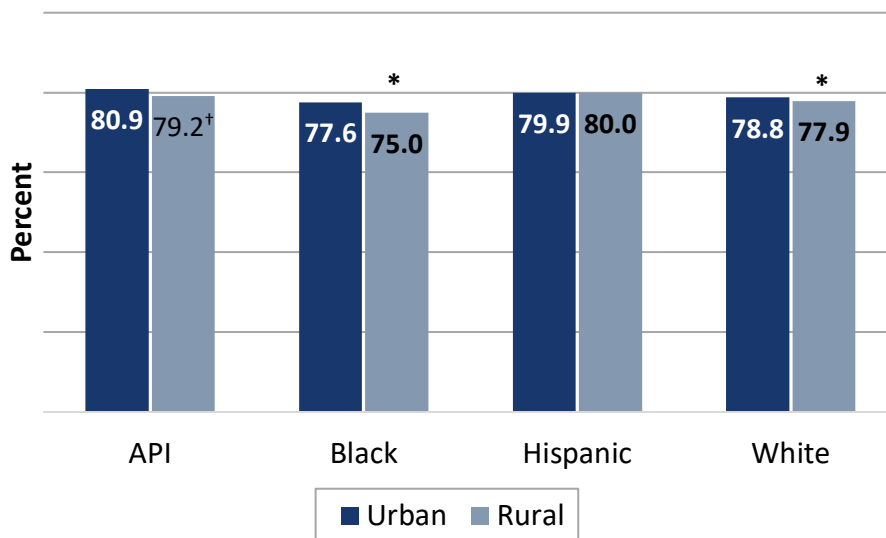
(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

<sup>†</sup> Excludes those who also have clinical atherosclerotic cardiovascular disease.

## Clinical Care: Musculoskeletal Conditions

### Rheumatoid Arthritis Management

**Percentage of MA enrollees aged 18 years and older who were diagnosed with rheumatoid arthritis during the past year who were dispensed at least one ambulatory prescription for a disease-modifying antirheumatic drug (DMARD), by geography within racial and ethnic group, 2018**



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> This score is based on fewer than 400 completed measures, and thus its precision may be low.

#### Disparities

- Among API and Hispanic beneficiaries, rural residents diagnosed with rheumatoid arthritis were about as likely as urban residents diagnosed with rheumatoid arthritis to have been dispensed at least one DMARD.
- Among Black and White beneficiaries, rural residents diagnosed with rheumatoid arthritis were less likely than urban residents diagnosed with rheumatoid arthritis to have been dispensed at least one DMARD. In each case, the difference between rural and urban residents was less than 3 percentage points.

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\* Significantly different from the score for urban residents of the same racial and ethnic group ( $p < 0.05$ ).

For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

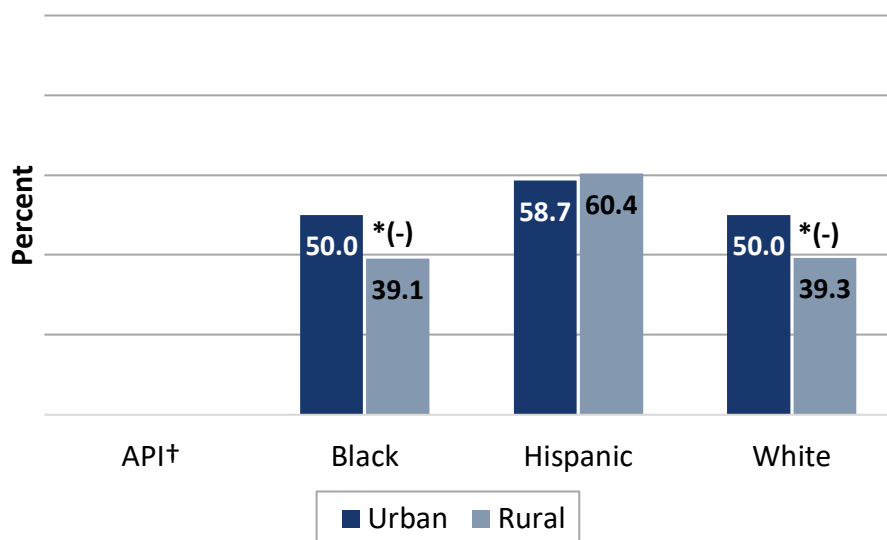
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.



## Osteoporosis Management in Women Who Had a Fracture

Percentage of MA enrollees (women) aged 67 to 85 years who suffered a fracture who had either a bone mineral density test or a prescription for a drug to treat osteoporosis in the six months after the fracture, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

† There were not enough data from API beneficiaries to make a rural-urban comparison on this measure.

### Disparities

- Among Black and White women, rural residents who suffered a fracture were less likely than urban residents who suffered a fracture to have had either a bone mineral density test or a prescription for a drug to treat osteoporosis. The difference between rural and urban Black women was greater than 3 percentage points, as was the difference between rural and urban White women.
- Rural Hispanic women who suffered a fracture were about as likely as urban Hispanic women who suffered a fracture to have had either a bone mineral density test or a prescription for a drug to treat osteoporosis.

\* Significantly different from the score for urban residents of the same racial and ethnic group ( $p < 0.05$ ).

For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

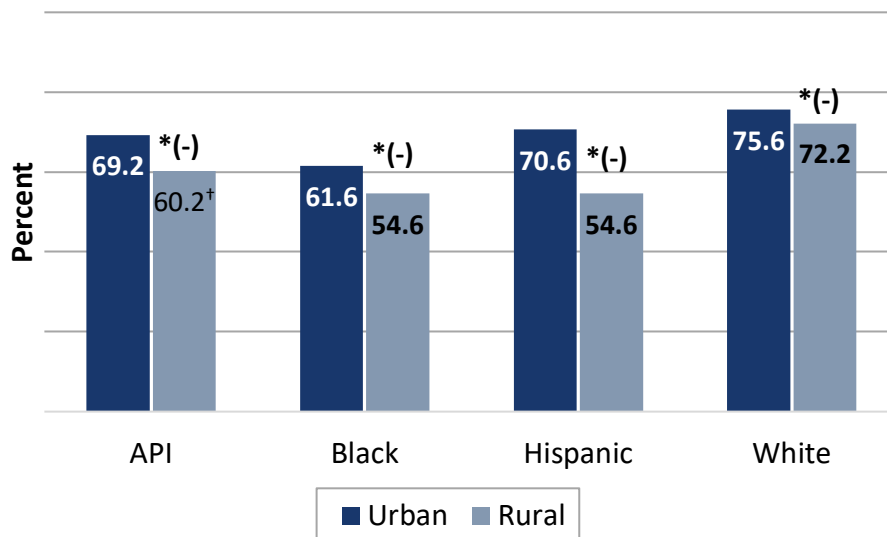
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

## Clinical Care: Behavioral Health

### Antidepressant Medication Management—Acute Phase Treatment

Percentage of MA enrollees aged 18 years and older who were diagnosed with a new episode of major depression who remained on antidepressant medication for at least 84 days, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> This score is based on fewer than 400 completed measures, and thus its precision may be low.

#### Disparities

- Among API, Black, Hispanic, and White beneficiaries, rural residents who were diagnosed with a new episode of major depression were less likely than urban residents who were diagnosed with a new episode of major depression to have remained on antidepressant medication for at least 84 days. For each of these racial and ethnic groups, the difference between rural and urban residents was greater than 3 percentage points.

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\* Significantly different from the score for urban residents of the same racial and ethnic group ( $p < 0.05$ ).

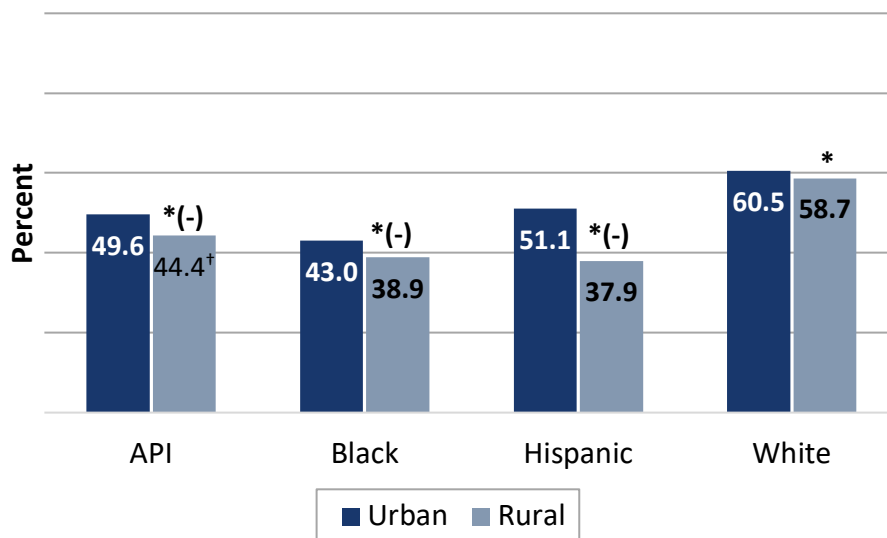
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

## Antidepressant Medication Management—Continuation Phase Treatment

Percentage of MA enrollees aged 18 years and older with a new diagnosis of major depression who were newly treated with antidepressant medication who remained on antidepressant medication for at least 180 days, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> This score is based on fewer than 400 completed measures, and thus its precision may be low.

### Disparities

- Among API, Black, Hispanic, and White beneficiaries, rural residents who were diagnosed with a new episode of major depression were less likely than urban residents who were diagnosed with a new episode of major depression to have been treated with and to have remained on antidepressant medication for at least 180 days. The difference between rural and urban APIs was greater than 3 percentage points, as were the differences between rural and urban Blacks and rural and urban Hispanics. The difference between rural and urban Whites was less than 3 percentage points.

\* Significantly different from the score for urban residents of the same racial and ethnic group ( $p < 0.05$ ).

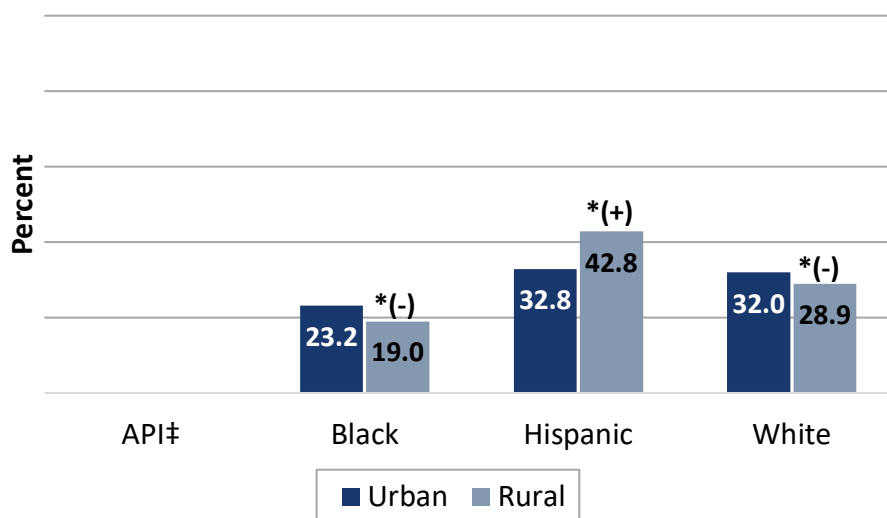
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

## Follow-up After Hospital Stay for Mental Illness (within seven days of discharge)

Percentage of MA enrollees aged 18 years and older<sup>†</sup> who were hospitalized for treatment of selected mental health disorders who had an outpatient visit, an intensive outpatient encounter, or partial hospitalization with a mental health practitioner within seven days of discharge, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> There were not enough data from API beneficiaries to make a rural-urban comparison on this measure.

### Disparities

- Among Black and White beneficiaries, rural residents who were hospitalized for a mental health disorder were less likely than urban residents who were hospitalized for a mental health disorder to have had a follow-up visit with a mental health practitioner within seven days of discharge. For each of these groups, the difference between rural and urban residents was greater than 3 percentage points.
- Rural Hispanics who were hospitalized for a mental health disorder were more likely than urban Hispanics who were hospitalized for a mental health disorder to have had a follow-up visit with a mental health practitioner within seven days of discharge. The difference between rural and urban Hispanics was greater than 3 percentage points.

\* Significantly different from the score for urban residents of the same racial and ethnic group ( $p < 0.05$ ).

For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

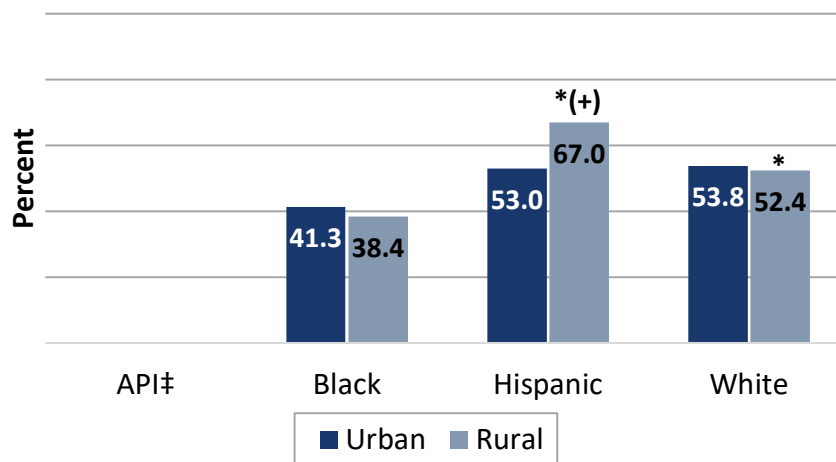
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

<sup>†</sup> Although the lower-bound age cutoff for this HEDIS measure is six years old, the data used in this report are limited to adults.

## Follow-up After Hospital Stay for Mental Illness (within 30 days of discharge)

Percentage of MA enrollees aged 18 years and older<sup>†</sup> who were hospitalized for treatment of selected mental health disorders who had an outpatient visit, an intensive outpatient encounter, or partial hospitalization with a mental health practitioner within 30 days of discharge, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>‡</sup> There were not enough data from API beneficiaries to make a rural-urban comparison on this measure.

### Disparities

- Rural Blacks who were hospitalized for a mental health disorder were about as likely as urban Blacks who were hospitalized for a mental health disorder to have had a follow-up visit with a mental health practitioner within 30 days of discharge.
- Rural Hispanics who were hospitalized for a mental health disorder were more likely than urban Hispanics who were hospitalized for a mental health disorder to have had a follow-up visit with a mental health practitioner within 30 days of discharge. The difference between rural and urban Hispanics was greater than 3 percentage points.
- Rural Whites who were hospitalized for a mental health disorder were less likely than urban Whites who were hospitalized for a mental health disorder to have had a follow-up visit with a mental health practitioner within 30 days of discharge. The difference between rural and urban Whites was less than 3 percentage points.

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\* Significantly different from the score for urban residents of the same racial and ethnic group ( $p < 0.05$ ). For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

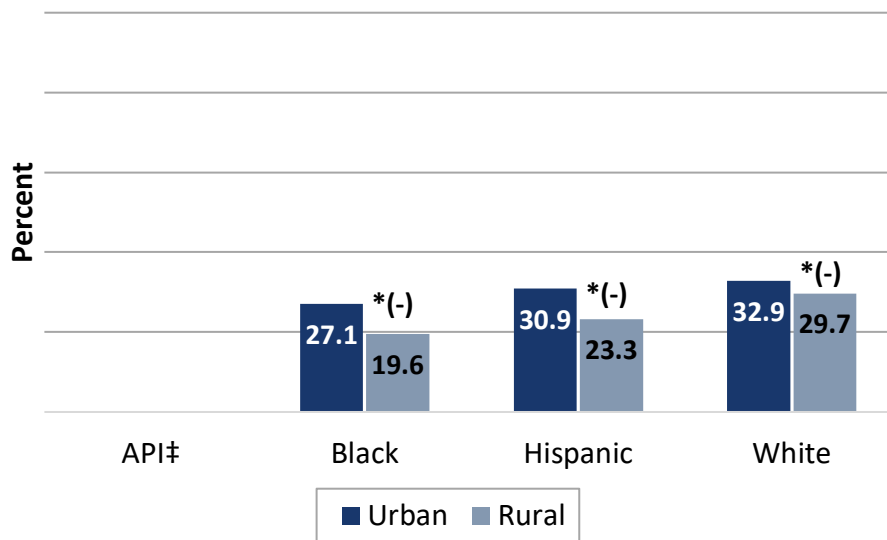
(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

<sup>†</sup> Although the lower-bound age cutoff for this HEDIS measure is six years old, the data used in this report are limited to adults.



## Follow-up After Emergency Department (ED) Visit for Mental Illness (within seven days of discharge)

Percentage of MA enrollees aged 18 years and older<sup>†</sup> who had an ED visit for selected mental health disorders who had an outpatient visit, an intensive outpatient encounter, or partial hospitalization with a mental health practitioner within seven days of the ED visit, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> There were not enough data from API beneficiaries to make a rural-urban comparison on this measure.

### Disparities

- Among Black, Hispanic, and White beneficiaries, rural residents who had an ED visit for a mental health disorder were less likely than urban residents who had an ED visit for a mental health disorder to have had a follow-up visit with a mental health practitioner within seven days of the ED visit. For each of these racial and ethnic groups, the difference between rural and urban residents was greater than 3 percentage points.

\* Significantly different from the score for urban residents of the same racial and ethnic group ( $p < 0.05$ ).

For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

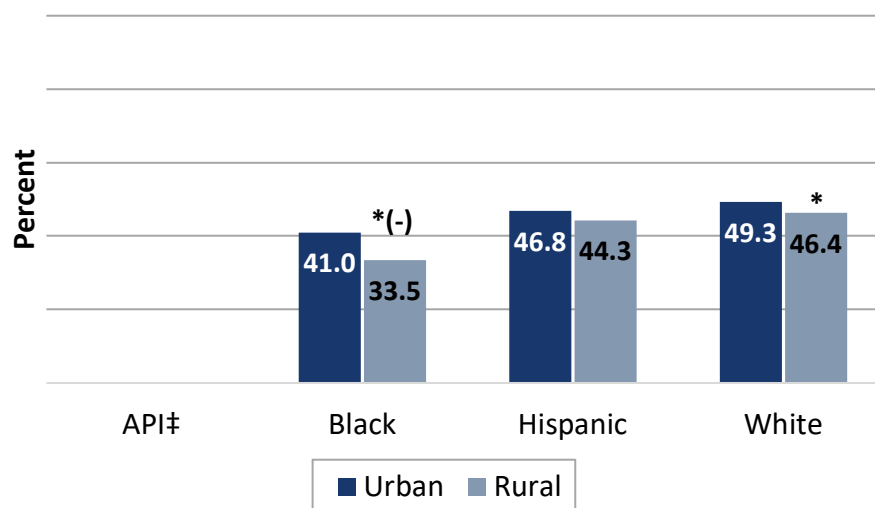
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

<sup>†</sup> Although the lower-bound age cutoff for this HEDIS measure is six years old, the data used in this report are limited to adults.

## Follow-up After Emergency Department (ED) Visit for Mental Illness (within 30 days of discharge)

Percentage of MA enrollees aged 18 years and older<sup>†</sup> who had an ED visit for selected mental health disorders who had an outpatient visit, an intensive outpatient encounter, or partial hospitalization with a mental health practitioner within 30 days of the ED visit, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>‡</sup> There were not enough data from API beneficiaries to make a rural-urban comparison on this measure.

### Disparities

- Among Black and White beneficiaries, rural residents who had an ED visit for a mental health disorder were less likely than urban residents who had an ED visit for a mental health disorder to have had a follow-up visit with a mental health practitioner within 30 days of the ED visit. The difference between rural and urban Blacks was greater than 3 percentage points. The difference between rural and urban Whites was less than 3 percentage points.
- Rural Hispanics who had an ED visit for a mental health disorder were about as likely as urban Hispanics who had an ED visit for a mental health disorder to have had a follow-up visit with a mental health practitioner within 30 days of the ED visit.

\* Significantly different from the score for urban residents of the same racial and ethnic group ( $p < 0.05$ ).

For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

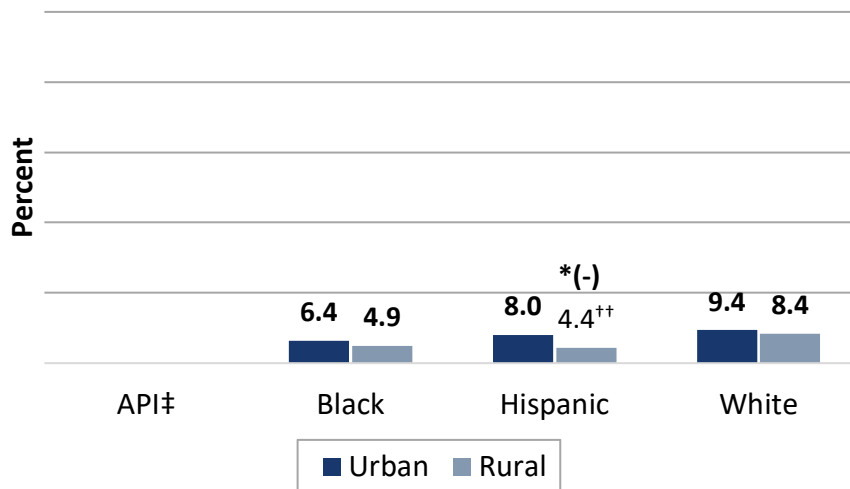
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

<sup>†</sup> Although the lower-bound age cutoff for this HEDIS measure is six years old, the data used in this report are limited to adults.

## Follow-up After Emergency Department (ED) Visit for Alcohol and Other Drug (AOD) Abuse or Dependence (within seven days of discharge)

Percentage of MA enrollees aged 18 years and older<sup>†</sup> who had an ED visit for AOD abuse or dependence who had a follow-up visit for AOD abuse or dependence within seven days of the ED visit, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>‡</sup> There were not enough data from API beneficiaries to make a rural-urban comparison on this measure.

<sup>\*\*</sup> This score is based on fewer than 400 completed measures, and thus its precision may be low.

### Disparities

- Among Black and White beneficiaries, rural residents who had an ED visit for AOD abuse or dependence were about as likely as urban residents who had an ED visit for AOD abuse or dependence to have had a follow-up visit for AOD abuse or dependence within seven days of the ED visit.
- Rural Hispanics who had an ED visit for AOD abuse or dependence were less likely than urban Hispanics who had an ED visit for AOD abuse or dependence to have had a follow-up visit for AOD abuse or dependence within seven days of the ED visit. The difference between rural and urban Hispanics was greater than 3 percentage points.

\* Significantly different from the score for urban residents of the same racial and ethnic group ( $p < 0.05$ ). For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

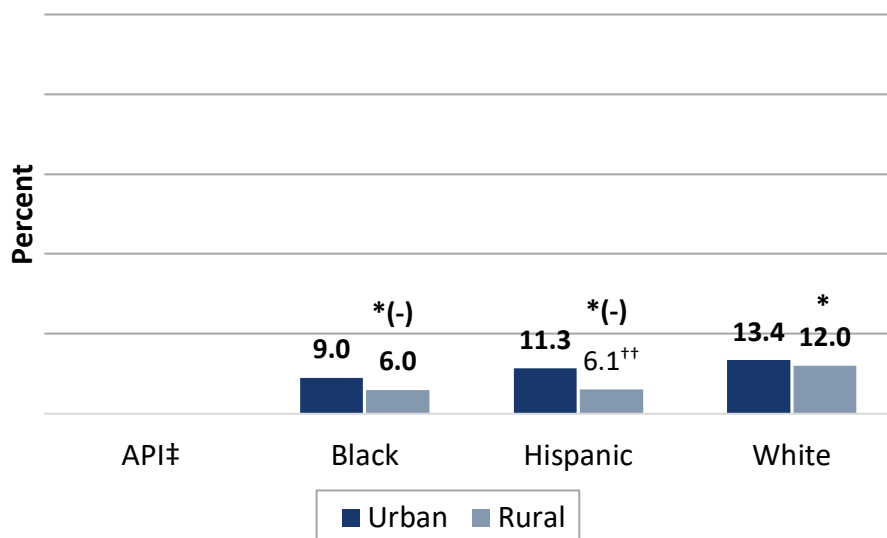
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

<sup>†</sup> Although the lower-bound age cutoff for this HEDIS measure is 13 years old, the data used in this report are limited to adults.

## Follow-up After Emergency Department (ED) Visit for Alcohol and Other Drug (AOD) Abuse or Dependence (within 30 days of discharge)

Percentage of MA enrollees aged 18 years and older<sup>†</sup> who had an ED visit for AOD abuse or dependence who had a follow-up visit for AOD abuse or dependence within 30 days of the ED visit, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> There were not enough data from API beneficiaries to make a rural-urban comparison on this measure.

<sup>††</sup> This score is based on fewer than 400 completed measures, and thus its precision may be low.

### Disparities

- Among Black, Hispanic, and White beneficiaries, rural residents who had an ED visit for AOD abuse or dependence were less likely than urban residents who had an ED visit for AOD abuse or dependence to have had a follow-up visit for AOD abuse or dependence within 30 days of the ED visit. The difference between rural and urban Blacks was greater than 3 percentage points, as was the difference between rural and urban Hispanics. The difference between rural and urban Whites was less than 3 percentage points.

\* Significantly different from the score for urban residents of the same racial and ethnic group ( $p < 0.05$ ).

For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

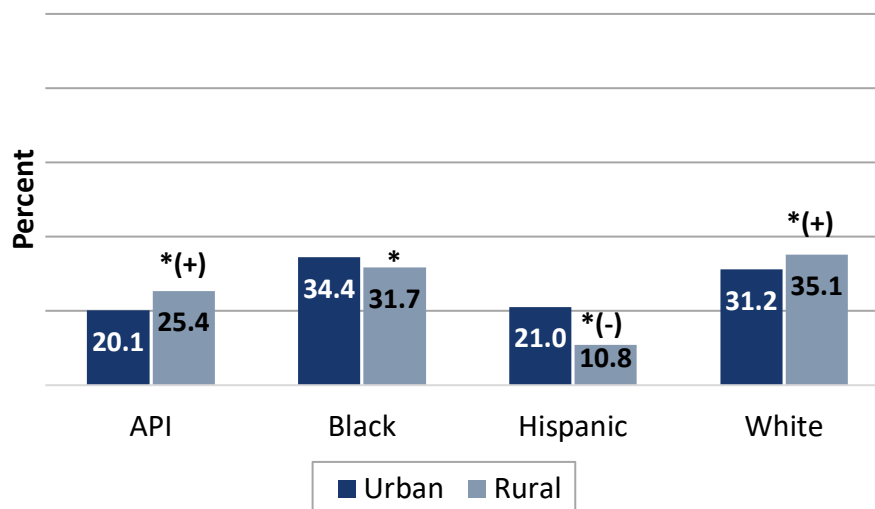
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

<sup>†</sup> Although the lower-bound age cutoff for this HEDIS measure is 13 years old, the data used in this report are limited to adults.

## Initiation of Alcohol and Other Drug Dependence Treatment

Percentage of MA enrollees aged 18 years and older<sup>†</sup> with a new episode of alcohol or other drug (AOD) dependence who initiate<sup>‡</sup> treatment within 14 days of the diagnosis, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Among API and White beneficiaries, rural residents with a new episode of AOD dependence were more likely than urban residents with a new episode of AOD dependence to have initiated treatment within 14 days of diagnosis. In each case, the difference between rural and urban residents was greater than 3 percentage points.
- Among Black and Hispanic beneficiaries, rural residents with a new episode of AOD dependence were less likely than urban residents with a new episode of AOD dependence to have initiated treatment within 14 days of diagnosis. The difference between rural and urban Blacks was less than 3 percentage points. The difference between rural and urban Hispanics was greater than 3 percentage points.

\* Significantly different from the score for urban residents of the same racial and ethnic group ( $p < 0.05$ ).

For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

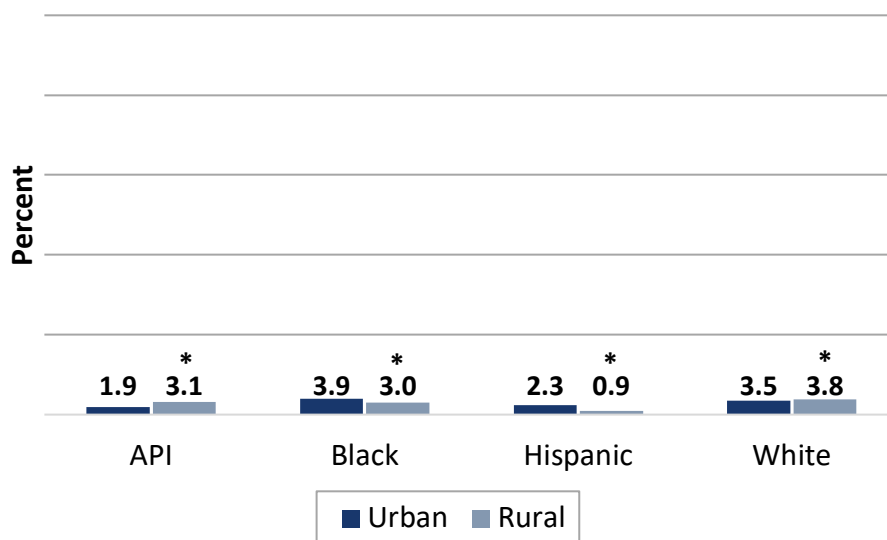
<sup>†</sup> Although the lower-bound age cutoff for this HEDIS measure is 13 years old, the data used in this report are limited to adults.

<sup>‡</sup> Initiation may occur through an inpatient AOD admission, outpatient visit, intensive outpatient encounter, or partial hospitalization.



## Engagement of Alcohol and Other Drug Dependence Treatment

Percentage of MA enrollees aged 18 years and older<sup>†</sup> with a new episode of alcohol or other drug (AOD) dependence who initiated treatment and who had two or more additional services within 30 days of the initiation visit, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Among API and White beneficiaries, rural residents with a new episode of AOD dependence who initiated treatment were more likely than urban residents with a new episode of AOD dependence who initiated treatment to have had two or more additional services within 30 days of their initial visit for treatment. In each case, the difference between rural and urban residents was less than 3 percentage points.
- Among Black and Hispanic beneficiaries, rural residents with a new episode of AOD dependence who initiated treatment were less likely than urban residents with a new episode of AOD dependence who initiated treatment to have had two or more additional services within 30 days of their initial visit for treatment. In each case, the difference between rural and urban residents was less than 3 percentage points.

\* Significantly different from the score for urban residents of the same racial and ethnic group ( $p < 0.05$ ).

For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

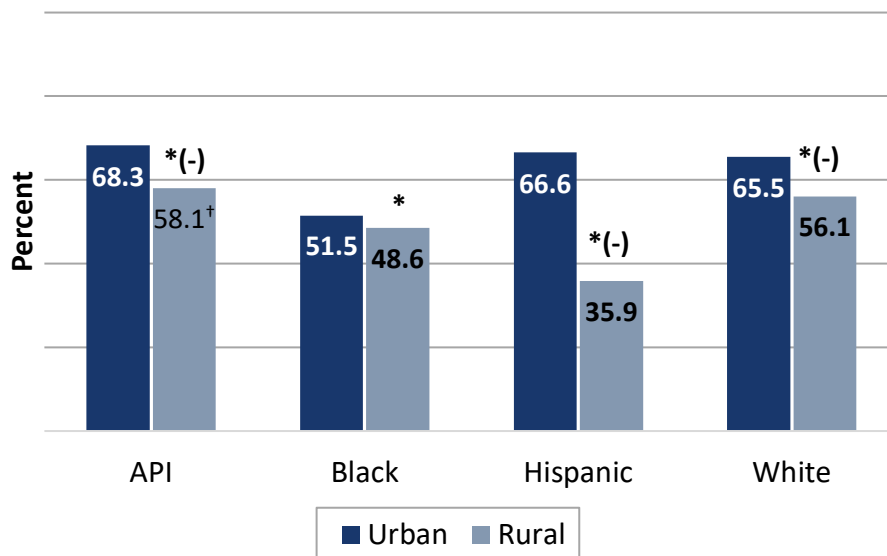
(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

<sup>†</sup> Although the lower-bound age cutoff for this HEDIS measure is 13 years old, the data used in this report are limited to adults.

## Clinical Care: Medication Management and Care Coordination

### Medication Reconciliation After Hospital Discharge

Percentage of MA enrollees aged 18 years and older who were discharged from an inpatient facility and had their medications reconciled within 30 days, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for FFS Medicare beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic; Hispanic ethnicity includes all races.

<sup>†</sup> This score is based on fewer than 400 completed measures, and thus its precision may be low.

#### Disparities

- Among API, Black, Hispanic, and White beneficiaries, rural residents who were discharged from an inpatient facility were less likely than urban residents who were discharged from an inpatient facility to have had their medications reconciled within 30 days. The difference between rural and urban APIs was greater than 3 percentage points, as were the differences between rural and urban Hispanics and rural and urban Whites. The difference between rural and urban Blacks was less than 3 percentage points.

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\* Significantly different from the score for urban residents of the same racial and ethnic group ( $p < 0.05$ ).

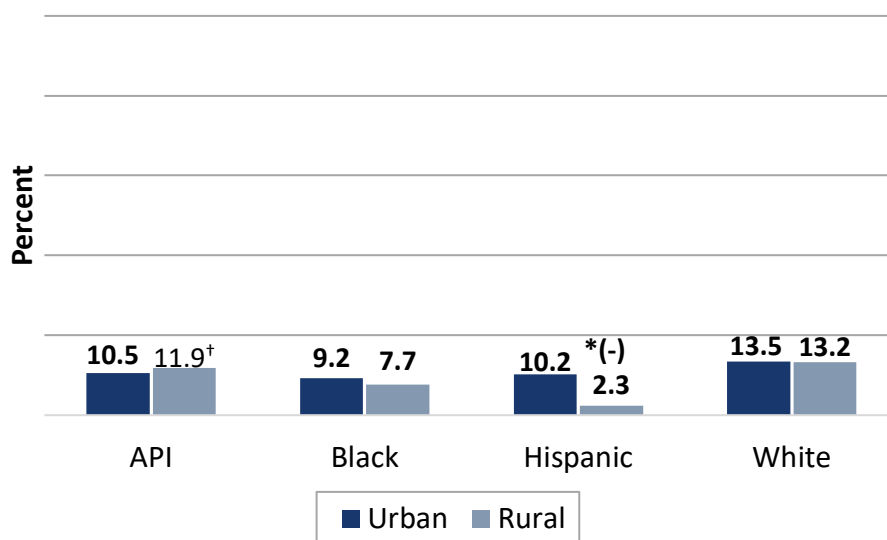
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

## Transitions of Care—Notification of Inpatient Admission

Percentage of MA enrollees aged 18 years and older who were discharged from an inpatient facility whose primary or ongoing care providers were notified of the inpatient admission on the day of or the day following admission, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> This score is based on fewer than 400 completed measures, and thus its precision may be low.

### Disparities

- Among API, Black, and White beneficiaries, the primary or ongoing care providers of rural residents who were discharged from an inpatient facility were about as likely as the primary or ongoing care providers of urban residents who were discharged from an inpatient facility to have been notified of the inpatient admission on the day of or the day following admission.
- The primary or ongoing care providers of rural Hispanics who were discharged from an inpatient facility were less likely than the primary or ongoing care providers of urban Hispanics who were discharged from an inpatient facility to have been notified of the inpatient admission on the day of or the day following admission. The difference between these groups was greater than 3 percentage points.

\* Significantly different from the score for urban residents of the same racial and ethnic group ( $p < 0.05$ ).

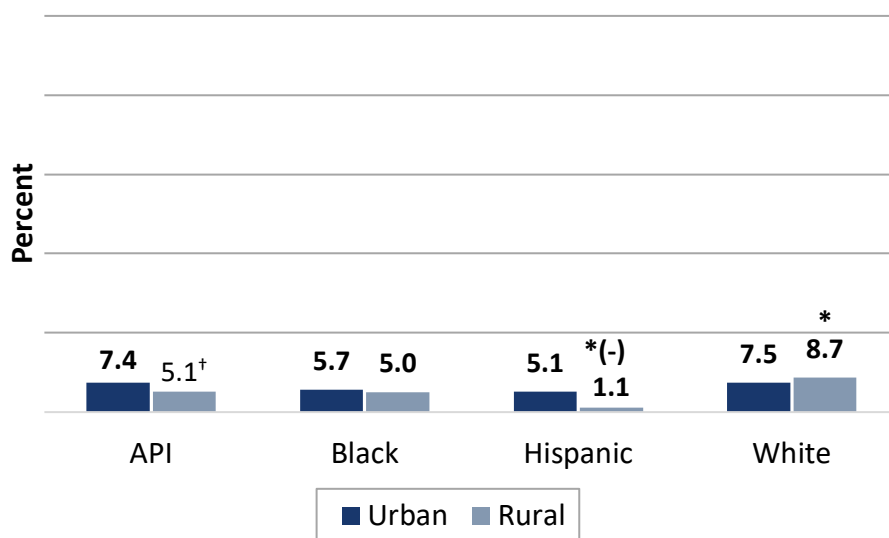
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

## Transitions of Care—Receipt of Discharge Information

Percentage of MA enrollees aged 18 years and older who were discharged from an inpatient facility who received discharge information on the day of or the day following discharge, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> This score is based on fewer than 400 completed measures, and thus its precision may be low.

### Disparities

- Among API and Black beneficiaries, rural residents who were discharged from an inpatient facility were about as likely as urban residents who were discharged from an inpatient facility to have received discharge information on the day of or the day following discharge.
- Rural Hispanics who were discharged from an inpatient facility were less likely than urban Hispanics who were discharged from an inpatient facility to have received discharge information on the day of or the day following discharge. The difference between rural and urban Hispanics was greater than 3 percentage points.
- Rural Whites who were discharged from an inpatient facility were more likely than urban Whites who were discharged from an inpatient facility to have received discharge information on the day of or the day following discharge. The difference between rural and urban Hispanics was less than 3 percentage points.

\* Significantly different from the score for urban residents of the same racial and ethnic group ( $p < 0.05$ ).

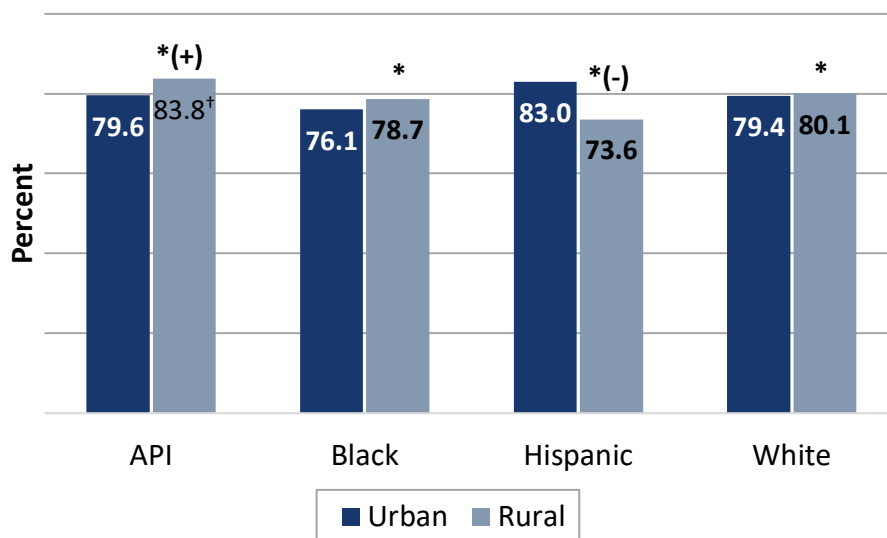
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

## Transitions of Care—Patient Engagement After Inpatient Discharge

Percentage of MA enrollees aged 18 years and older who were discharged from an inpatient facility for whom patient engagement (office visit, home visit, telehealth) was provided within 30 days of discharge, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> This score is based on fewer than 400 completed measures, and thus its precision may be low.

### Disparities

- Among API, Black, and White beneficiaries, rural residents who were discharged from an inpatient facility were more likely than urban residents who were discharged from an inpatient facility to have had an office visit, home visit, or to have received telehealth services within 30 days of discharge. The difference between rural and urban APIs was greater than 3 percentage points. The difference between rural and urban Blacks was less than 3 percentage points, as was the difference between rural and urban Whites.
- Rural Hispanics who were discharged from an inpatient facility were less likely than urban Hispanics who were discharged from an inpatient facility to have had an office visit, home visit, or to have received telehealth services within 30 days of discharge. The difference between rural and urban Hispanics was greater than 3 percentage points.

\* Significantly different from the score for urban residents of the same racial and ethnic group ( $p < 0.05$ ).

For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

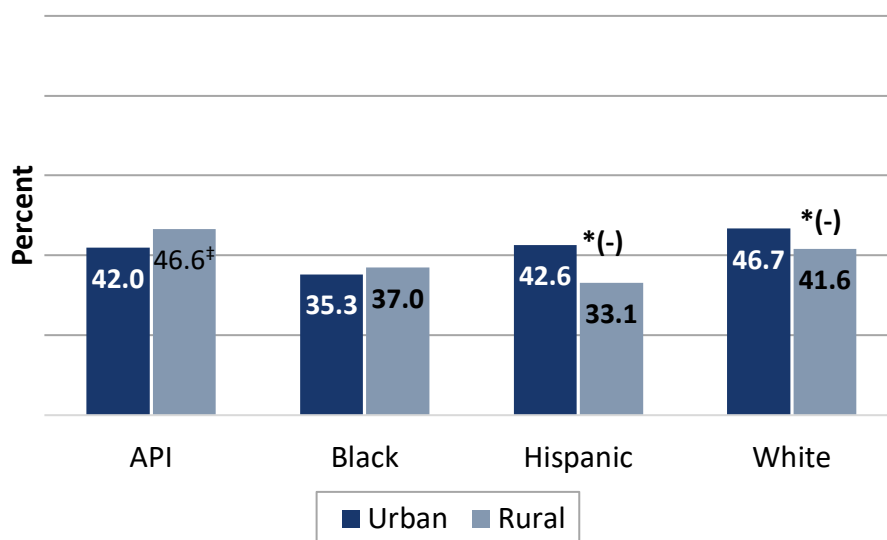
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.



## Transitions of Care—Medication Reconciliation After Inpatient Discharge

Percentage of MA enrollees aged 18 years and older who were discharged from an inpatient facility for whom medications were reconciled within 30 days of discharge,<sup>†</sup> by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> This score is based on fewer than 400 completed measures, and thus its precision may be low.

### Disparities

- Among API and Black beneficiaries, rural residents who were discharged from an inpatient facility were about as likely as urban residents who were discharged from an inpatient facility to have had their medications reconciled within 30 days of discharge.
- Among Hispanic and White beneficiaries, rural residents who were discharged from an inpatient facility were less likely than urban residents who were discharged from an inpatient facility to have had their medications reconciled within 30 days of discharge. For each of these groups, the difference between rural and urban residents was greater than 3 percentage points.

\* Significantly different from the score for urban residents of the same racial and ethnic group ( $p < 0.05$ ).

For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

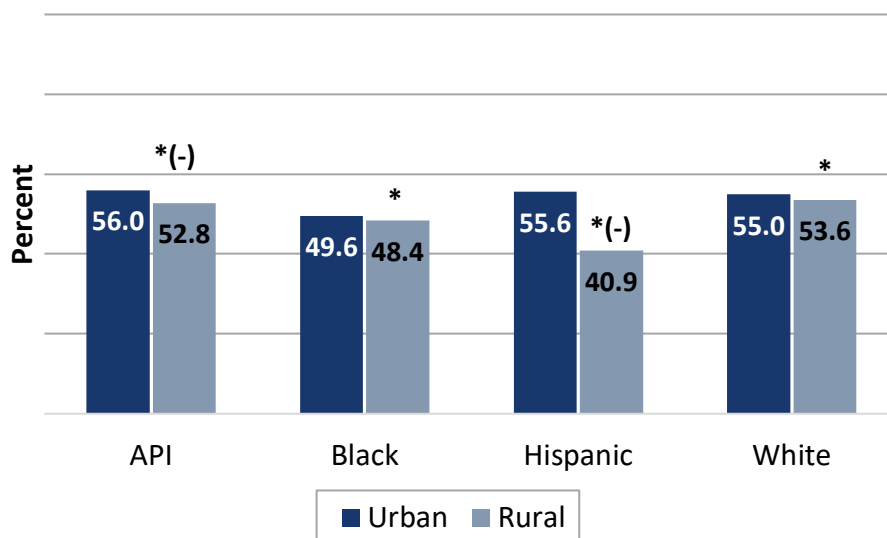
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

<sup>†</sup> Scores on this measure may differ from scores on the medication reconciliation measure presented on page 110 because of different rules governing the collection of the data.

## Follow-Up After Emergency Department (ED) Visit for People with High-Risk Multiple Chronic Conditions

Percentage of MA enrollees aged 18 years and older with multiple high-risk chronic conditions<sup>†</sup> who received follow-up care within seven days of an ED visit, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Among API, Black, Hispanic, and White beneficiaries, rural residents with multiple high-risk chronic conditions<sup>†</sup> were less likely than urban residents with multiple high-risk chronic conditions to have received follow-up care within seven days of an ED visit. The difference between rural and urban APIs was greater than 3 percentage points, as was the difference between rural and urban Hispanics. The difference between rural and urban Blacks was less than 3 percentage points, as was the difference between rural and urban Whites.

\* Significantly different from the score for urban residents of the same racial and ethnic group ( $p < 0.05$ ).

For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

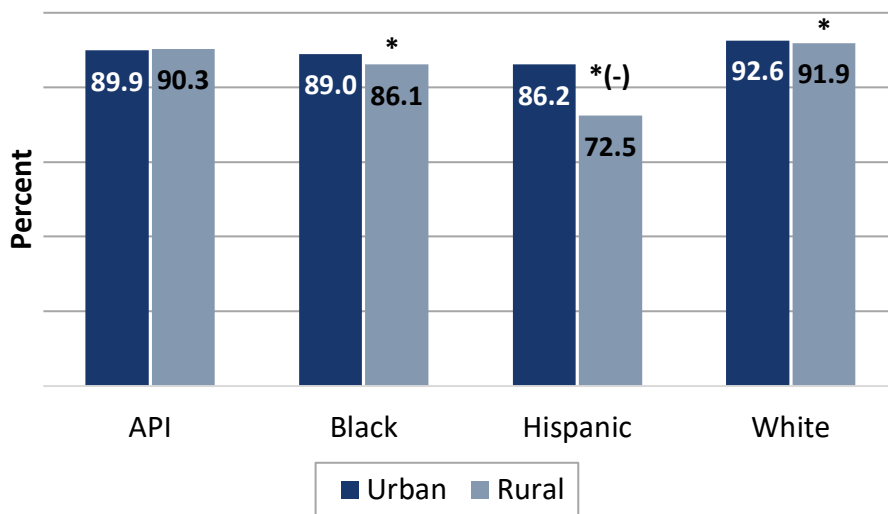
(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

<sup>†</sup> Conditions include COPD and asthma, Alzheimer's disease and related disorders, chronic kidney disease, depression, heart failure, acute myocardial infarction, atrial fibrillation, and stroke and transient ischemic attack.

## Clinical Care: Overuse/Appropriateness

### Avoiding Potentially Harmful Drug-Disease Interactions in Elderly Patients with Chronic Renal Failure

Percentage of MA enrollees aged 65 years and older with chronic renal failure who were not dispensed a prescription for a potentially harmful medication,<sup>†</sup> by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

#### Disparities

- Among API beneficiaries, use of potentially harmful medication<sup>†</sup> was avoided about as often for rural elderly residents with chronic renal failure as for urban elderly residents with chronic renal failure.
- Among Black, Hispanic, and White beneficiaries, use of potentially harmful medication was avoided less often for rural elderly residents with chronic renal failure than for urban elderly residents with chronic renal failure. The difference between rural and urban elderly Blacks was less than 3 percentage points, as was the difference between rural and urban elderly Whites. The difference between rural and urban elderly Hispanics was greater than 3 percentage points.

\* Significantly different from the score for urban residents of the same racial and ethnic group ( $p < 0.05$ ). For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

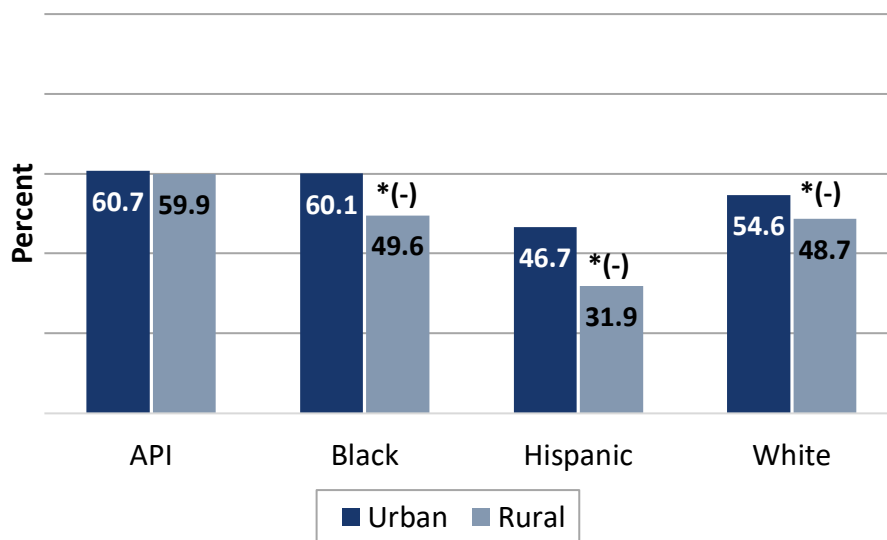
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

<sup>†</sup> This includes cyclooxygenase-2 (COX-2) selective nonsteroidal anti-inflammatory drugs (NSAIDs) or nonaspirin NSAIDs.

## Avoiding Potentially Harmful Drug-Disease Interactions in Elderly Patients with Dementia

Percentage of MA enrollees aged 65 years and older with dementia who were not dispensed a prescription for a potentially harmful medication,<sup>†</sup> by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Among API beneficiaries, use of potentially harmful medication<sup>†</sup> was avoided about as often for rural elderly residents with chronic renal failure as for urban elderly residents with chronic renal failure.
- Among Black, Hispanic, and White beneficiaries, use of potentially harmful medication was avoided less often for rural elderly residents with chronic renal failure than for urban elderly residents with chronic renal failure. For each of these racial and ethnic groups, the difference between rural elderly residents and urban elderly residents was greater than 3 percentage points.

\* Significantly different from the score for urban residents of the same racial and ethnic group ( $p < 0.05$ ).

For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

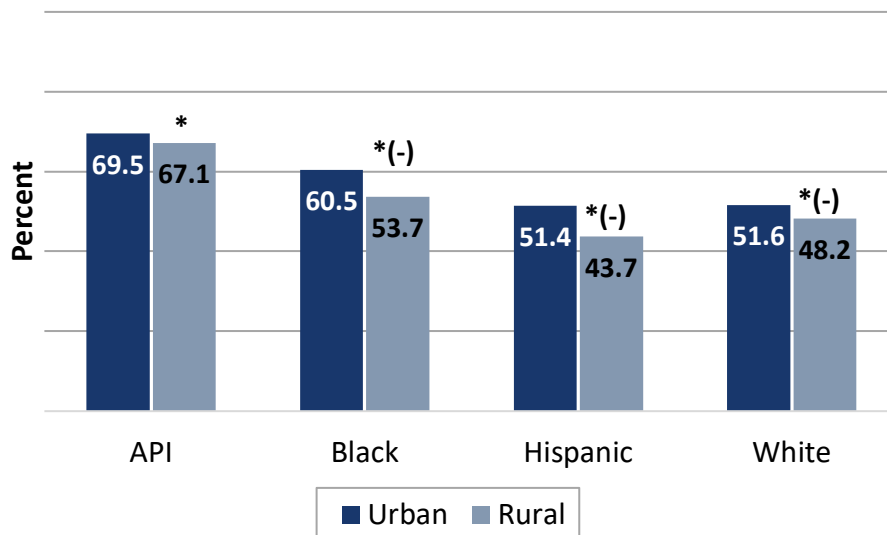
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

<sup>†</sup> This includes antiemetics, antipsychotics, benzodiazepines, tricyclic antidepressants, H2 receptor antagonists, nonbenzodiazepine hypnotics, and anticholinergic agents.

## Avoiding Potentially Harmful Drug-Disease Interactions in Elderly Patients with a History of Falls

Percentage of MA enrollees aged 65 years and older with a history of falls who were not dispensed a prescription for a potentially harmful medication,<sup>†</sup> by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Among API, Black, Hispanic, and White beneficiaries, use of potentially harmful medication<sup>†</sup> was avoided less often for elderly rural residents with a history of falls than for elderly urban residents with a history of falls. The difference between rural and urban APIs was less than 3 percentage points. The difference between rural and urban Blacks was greater than 3 percentage points, as were the differences between rural and urban Hispanics and between rural and urban Whites.

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\* Significantly different from the score for urban residents of the same racial and ethnic group ( $p < 0.05$ ).

For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

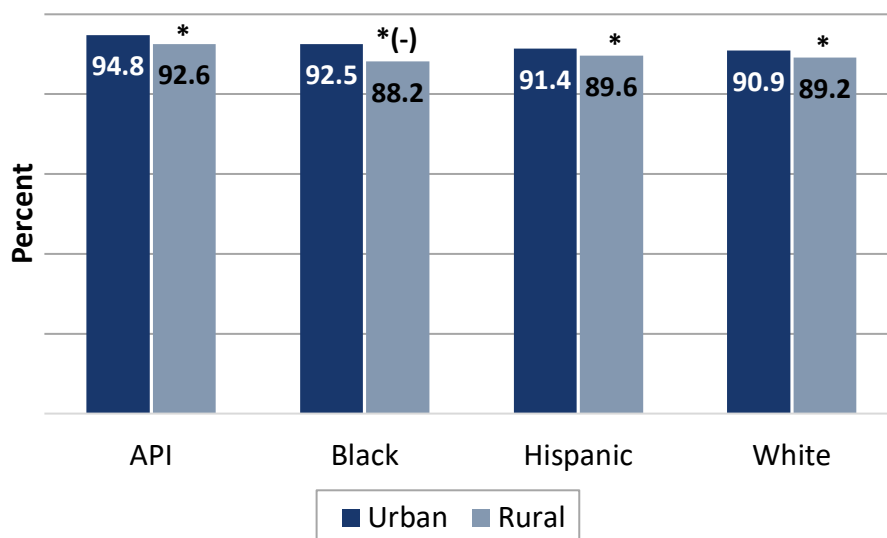
(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

<sup>†</sup> This includes anticonvulsants, nonbenzodiazepine hypnotics, selective serotonin reuptake inhibitors (SSRIs), antiemetics, antipsychotics, benzodiazepines, and tricyclic antidepressants.



## Avoiding Use of High-Risk Medications in the Elderly

Percentage of MA enrollees aged 65 years and older who were not prescribed a high-risk medication, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Among API, Black, Hispanic, and White beneficiaries, use of high-risk medication was avoided less often for rural residents than for urban residents. The difference between rural and urban APIs was less than 3 percentage points, as were the differences between rural and urban Hispanics and between rural and urban Whites. The difference between rural and urban Blacks was greater than 3 percentage points.

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\* Significantly different from the score for urban residents of the same racial and ethnic group ( $p < 0.05$ ).

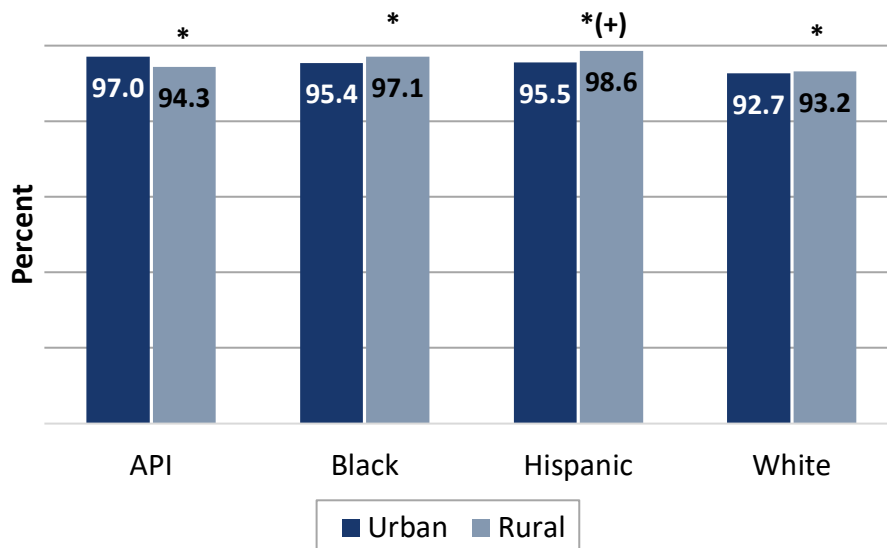
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

## Avoiding Use of Opioids at High Dosage

Percentage of MA enrollees aged 18 years and older who were not prescribed opioids at a high dosage<sup>†</sup> for more than 14 days, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Among API beneficiaries, use of opioids at a high dosage<sup>†</sup> for more than 14 days was avoided less often for rural residents than for urban residents. The difference between rural and urban APIs was less than 3 percentage points.
- Among Black, Hispanic, and White beneficiaries, use of opioids at a high dosage<sup>†</sup> for more than 14 days was avoided more often for rural residents than for urban residents. The difference between rural and urban Blacks was less than 3 percentage points, as was the difference between rural and urban Whites. The difference between rural and urban Hispanics was greater than 3 percentage points.

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\* Significantly different from the score for urban residents of the same racial and ethnic group ( $p < 0.05$ ).

For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

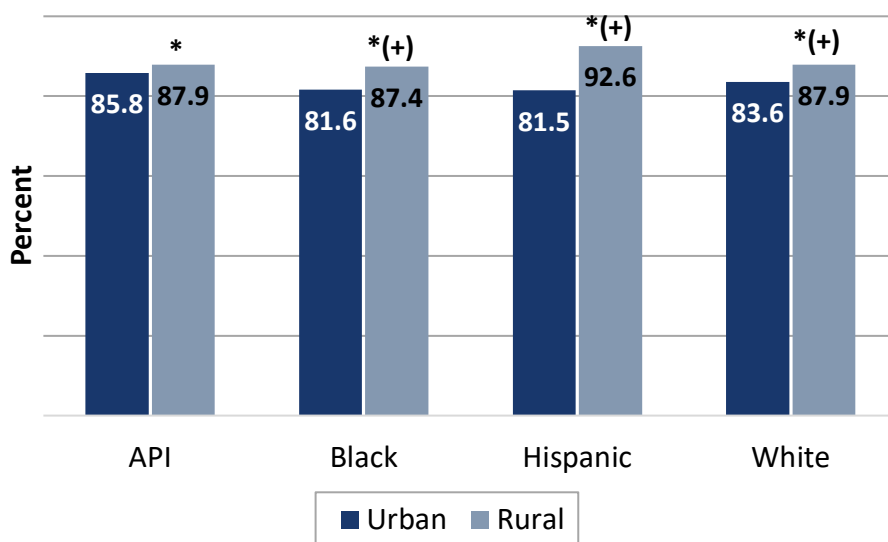
(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

<sup>†</sup> Average morphine equivalent dose > 120 mg

## Avoiding Use of Opioids from Multiple Prescribers

Percentage of MA enrollees aged 18 years and older who did not receive prescriptions for opioids from four or more prescribers in the past year, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Among API, Black, Hispanic, and White beneficiaries, use of opioids from multiple prescribers was avoided more often for rural residents than for urban residents. The difference between rural and urban APIs was less than 3 percentage points. The difference between rural and urban Blacks was greater than 3 percentage points, as were the differences between rural and urban Hispanics and between rural and urban Whites.

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\* Significantly different from the score for urban residents of the same racial and ethnic group ( $p < 0.05$ ).

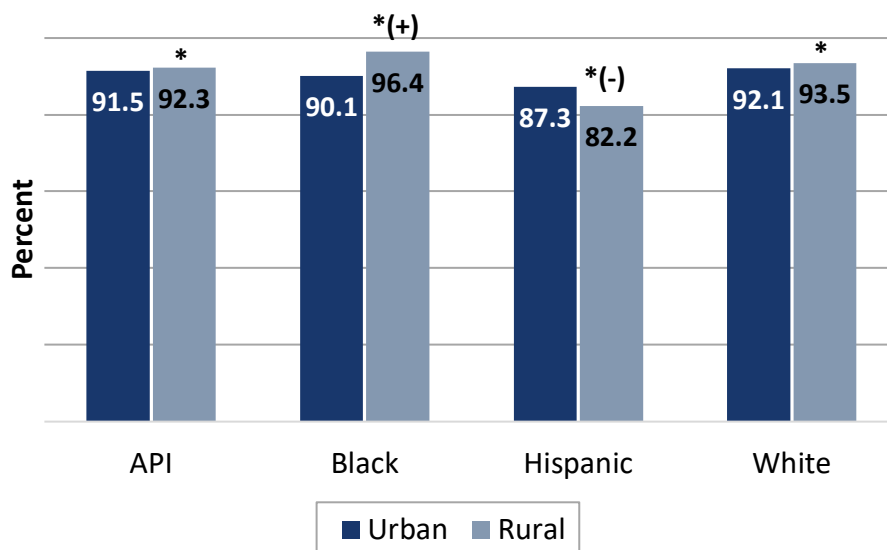
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

## Avoiding Use of Opioids from Multiple Pharmacies

Percentage of MA enrollees aged 18 years and older who did not receive prescriptions for opioids from four or more pharmacies in the past year, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Among API, Black, and White beneficiaries, use of opioids from multiple pharmacies was avoided more often for rural residents than for urban residents. The difference between rural and urban APIs was less than 3 percentage points, as was the difference between rural and urban Whites. The difference between rural and urban Blacks was greater than 3 percentage points.
- Among Hispanic beneficiaries, use of opioids from multiple pharmacies was avoided less often for rural residents than for urban residents. The difference between rural and urban Hispanics was greater than 3 percentage points.

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\* Significantly different from the score for urban residents of the same racial and ethnic group ( $p < 0.05$ ).

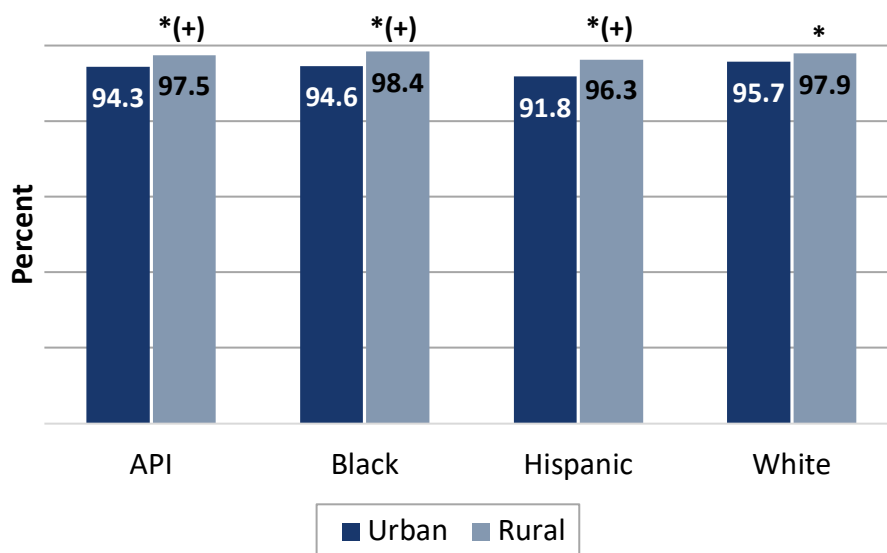
For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

## Avoiding Use of Opioids from Multiple Prescribers and Pharmacies

Percentage of MA enrollees aged 18 years and older who did not receive prescriptions for opioids from four or more prescribers and four or more pharmacies in the past year, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Among API, Black, Hispanic, and White beneficiaries, use of opioids from multiple prescribers and pharmacies was avoided more often for rural residents than for urban residents. The difference between rural and urban APIs was greater than 3 percentage points, as were the differences between rural and urban Blacks and between rural and urban Hispanics. The difference between rural and urban Whites was less than 3 percentage points.

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\* Significantly different from the score for urban residents of the same racial and ethnic group ( $p < 0.05$ ).

For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

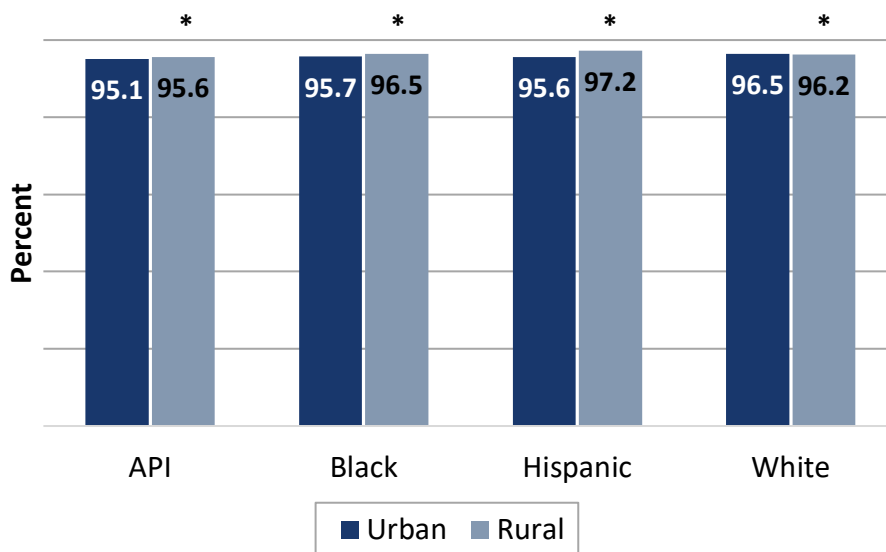
(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.



## Clinical Care: Access/Availability of Care

### Older Adults' Access to Preventive/Ambulatory Services

Percentage of MA enrollees aged 65 years and older who had an ambulatory or preventive care visit, by geography within racial and ethnic group, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Among API, Black, and Hispanic beneficiaries, rural residents were more likely than urban residents to have had an ambulatory or preventive care visit. For each of these groups, the difference between rural and urban residents was less than 3 percentage points.
- Rural Whites were less likely than urban Whites to have had an ambulatory or preventive care visit. The difference between rural and urban Whites was less than 3 percentage points.

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\* Significantly different from the score for urban residents of the same racial and ethnic group ( $p < 0.05$ ).

For statistically significant differences between rural and urban residents of the same race or ethnicity, the following symbols are also used when applicable:

(+) Difference is equal to or larger than 3 points (prior to rounding) and favors rural residents.

(-) Difference is equal to or larger than 3 points (prior to rounding) and favors urban residents.

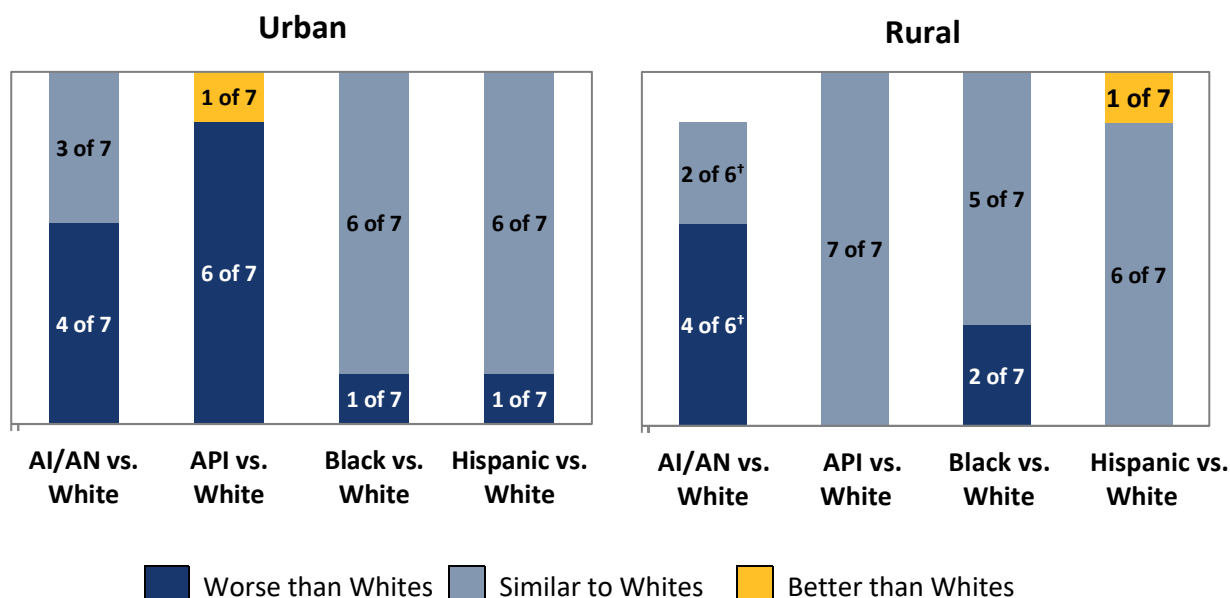


## Section III: Racial and Ethnic Disparities in Health Care in Medicare Within Urban and Rural Areas



## Racial and Ethnic Disparities in Care Within Urban and Rural Areas: All Patient Experience Measures, Medicare Advantage

Number of patient experience measures for which urban and rural residents of selected racial and ethnic minority groups reported experiences that were worse than, similar to, or better than the experiences reported by White urban and rural residents in 2018



**SOURCE:** Data from the 2018 Medicare CAHPS survey.

**NOTES:** AI/AN = American Indian or Alaska Native. API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> For one patient experience measure, there were not enough data from rural MA AI/AN beneficiaries to compare their experiences to those of rural MA White beneficiaries.

### Urban AI/AN MA beneficiaries received worse care than urban White MA beneficiaries

- Getting needed care
- Getting appointments and care quickly
- Getting needed prescription drugs
- Annual flu vaccine

### Urban API MA beneficiaries received worse care than urban White MA beneficiaries

- Getting needed care
- Getting appointments and care quickly
- Customer service
- Doctors who communicate well
- Care coordination
- Getting needed prescription drugs

**Urban API MA beneficiaries received better care than urban White MA beneficiaries**

- Annual flu vaccine

**Urban Black MA beneficiaries received worse care than urban White MA beneficiaries**

- Annual flu vaccine

**Urban Hispanic MA beneficiaries received worse care than urban White MA beneficiaries**

- Getting appointments and care quickly

**Rural AI/AN MA beneficiaries received worse care than rural White MA beneficiaries**

- Getting needed care
- Getting appointments and care quickly
- Getting needed prescription drugs
- Annual flu vaccine

**Rural Black MA beneficiaries received worse care than rural White MA beneficiaries**

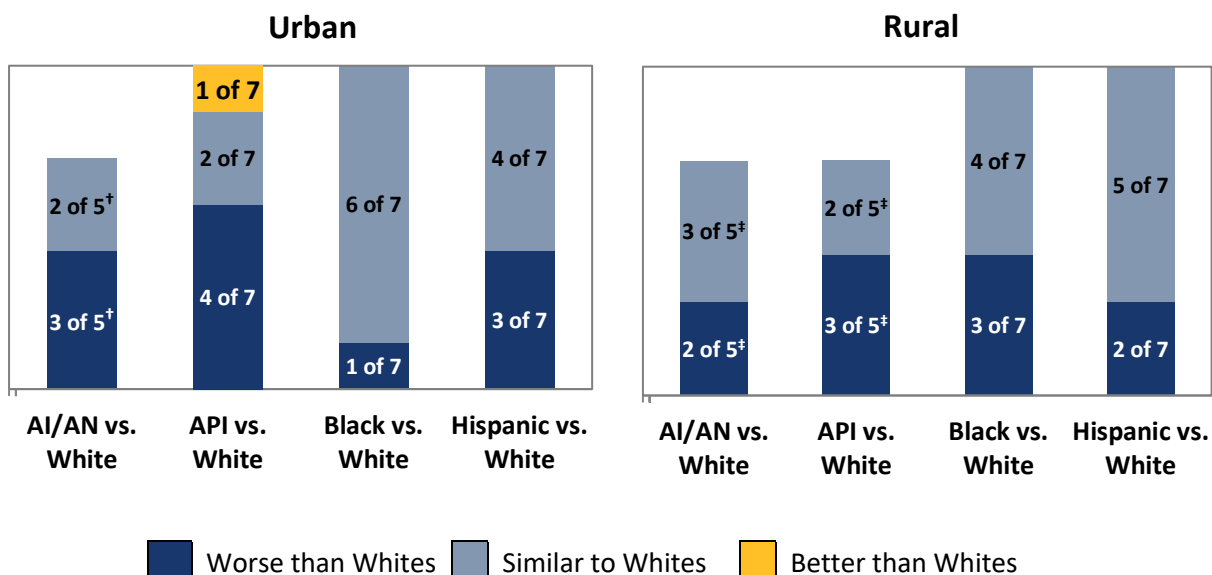
- Getting appointments and care quickly
- Annual flu vaccine

**Rural Hispanic MA beneficiaries received better care than rural White MA beneficiaries**

- Getting needed prescription drugs

## Racial and Ethnic Disparities in Care Within Urban and Rural Areas: All Patient Experience Measures, Fee-for-Service

Number of patient experience measures for which urban and rural residents of selected racial and ethnic minority groups reported experiences that were worse than, similar to, or better than the experiences reported by White urban and rural residents in 2018



**SOURCE:** Data from the 2018 Medicare CAHPS survey.

**NOTES:** AI/AN = American Indian or Alaska Native. API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> For two patient experience measures, there were not enough data from urban FFS AI/AN beneficiaries to compare their experiences to those of urban FFS White beneficiaries.

<sup>‡</sup> For two patient experience measures, there were not enough data from rural FFS AI/AN beneficiaries or from rural FFS API beneficiaries to compare their experiences to those of rural FFS White beneficiaries.

### Urban AI/AN FFS beneficiaries received worse care than urban White FFS beneficiaries

- Getting needed care
- Getting appointments and care quickly
- Annual flu vaccine

### Urban API FFS beneficiaries received worse care than urban White FFS beneficiaries

- Getting needed care
- Getting appointments and care quickly
- Customer service
- Doctors who communicate well

### Urban API FFS beneficiaries received better care than urban White FFS beneficiaries

- Annual flu vaccine



**Urban Black FFS beneficiaries received worse care than urban White FFS beneficiaries**

- Annual flu vaccine

**Urban Hispanic FFS beneficiaries received worse care than urban White FFS beneficiaries**

- Getting needed care
- Getting appointments and care quickly
- Annual flu vaccine

**Rural AI/AN FFS beneficiaries received worse care than rural White FFS beneficiaries**

- Getting needed care
- Getting appointments and care quickly

**Rural API FFS beneficiaries received worse care than rural White FFS beneficiaries**

- Getting needed care
- Getting appointments and care quickly
- Doctors who communicate well

**Rural Black FFS beneficiaries received worse care than rural White FFS beneficiaries**

- Getting appointments and care quickly
- Getting needed prescription drugs
- Annual flu vaccine

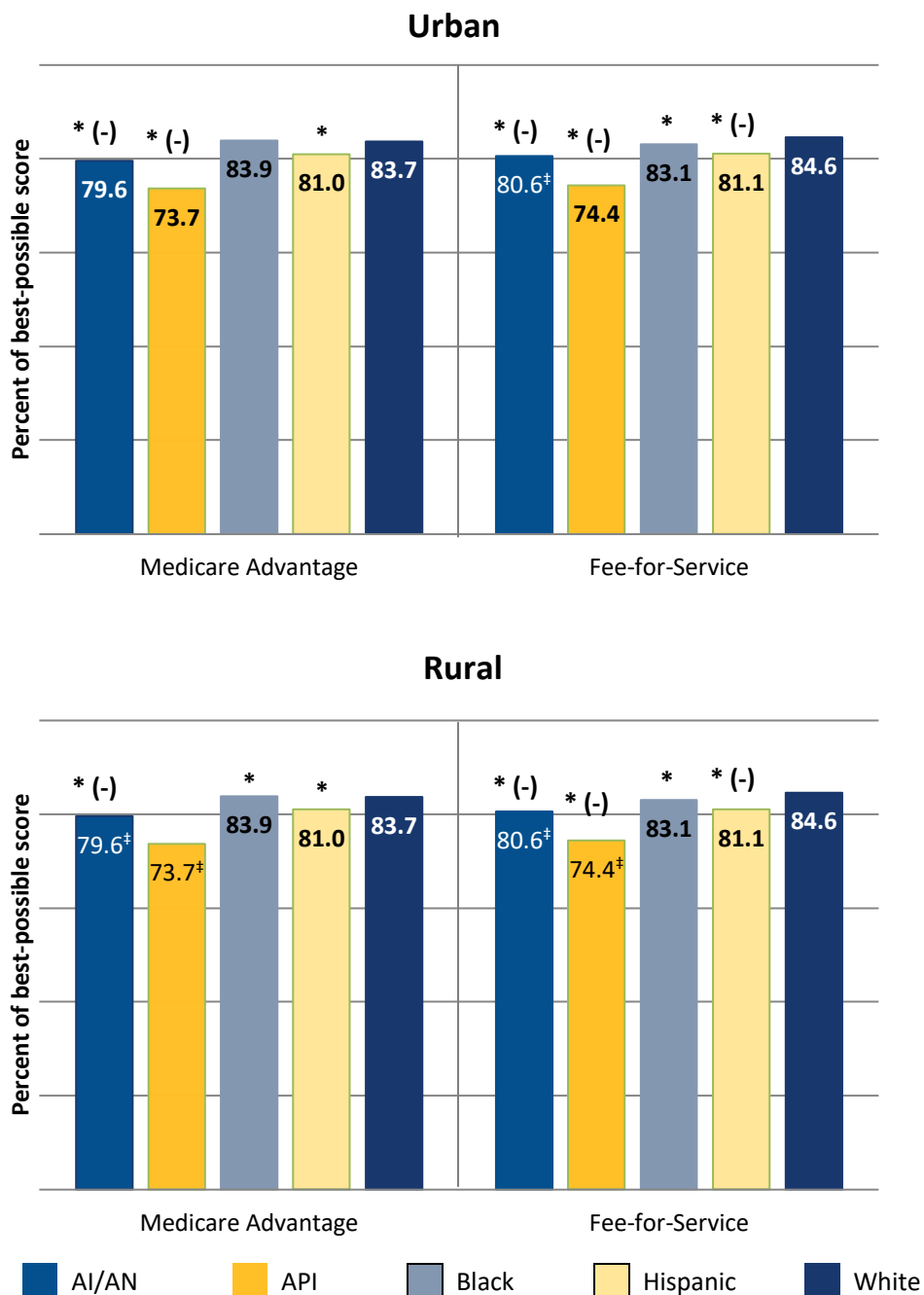
**Rural Hispanic FFS beneficiaries received worse care than rural White FFS beneficiaries**

- Getting needed care
- Getting appointments and care quickly

## Patient Experience

### Patient Experience: Getting Needed Care

Percentage of the best possible score (on a 0–100 scale) earned on how easy it is for patients to get needed care,<sup>†</sup> by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Data from the Medicare CAHPS survey, 2018.

**NOTES:** AI/AN = American Indian or Alaska Native. API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>‡</sup> This score is based on fewer than 400 completed measures, and thus its precision may be low.

Disparities

- In both MA and FFS, urban AI/AN beneficiaries reported worse experiences getting needed care than urban White beneficiaries. In each case, the difference between urban AI/AN and urban White beneficiaries was greater than 3 points on a 0–100 scale.
- In both MA and FFS, rural AI/AN beneficiaries reported worse experiences getting needed care than rural White beneficiaries. In each case, the difference between rural AI/AN and rural White beneficiaries was greater than 3 points on a 0–100 scale.
- In both MA and FFS, urban API beneficiaries reported worse experiences getting needed care than urban White beneficiaries. In each case, the difference between urban API and urban White beneficiaries was greater than 3 points on a 0–100 scale.
- Rural API MA beneficiaries reported experiences getting needed care that were similar to the experiences reported by rural White MA beneficiaries. Rural API FFS beneficiaries reported worse experiences getting needed care than rural White FFS beneficiaries. The difference between rural API and rural White FFS beneficiaries was greater than 3 points on a 0–100 scale.
- Urban Black MA beneficiaries reported experiences getting needed care that were similar to the experiences reported by urban White MA beneficiaries. Urban Black FFS beneficiaries reported worse experiences getting needed care than urban White FFS beneficiaries. The difference between urban Black and urban White FFS beneficiaries was less than 3 points on a 0–100 scale.
- In both MA and FFS, rural Black beneficiaries reported worse experiences getting needed care than rural White beneficiaries. In each case, the difference between rural Black and rural White beneficiaries was less than 3 points on a 0–100 scale.
- In both MA and FFS, urban Hispanic beneficiaries reported worse experiences getting needed care than urban White beneficiaries. The difference between urban Hispanic and urban White MA beneficiaries was less than 3 points on a 0–100 scale. The difference between urban Hispanic and urban White FFS beneficiaries was greater than 3 points on a 0–100 scale.
- In both MA and FFS, rural Hispanic beneficiaries reported worse experiences getting needed care than rural White beneficiaries. The difference between rural Hispanic and White MA beneficiaries was less than 3 points on a 0–100 scale. The difference between rural Hispanic and rural White FFS beneficiaries was greater than 3 points on a 0–100 scale.

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\* Significantly different from the score for White residents of the same locality and coverage type ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality and coverage type, the following symbols are also used when applicable:

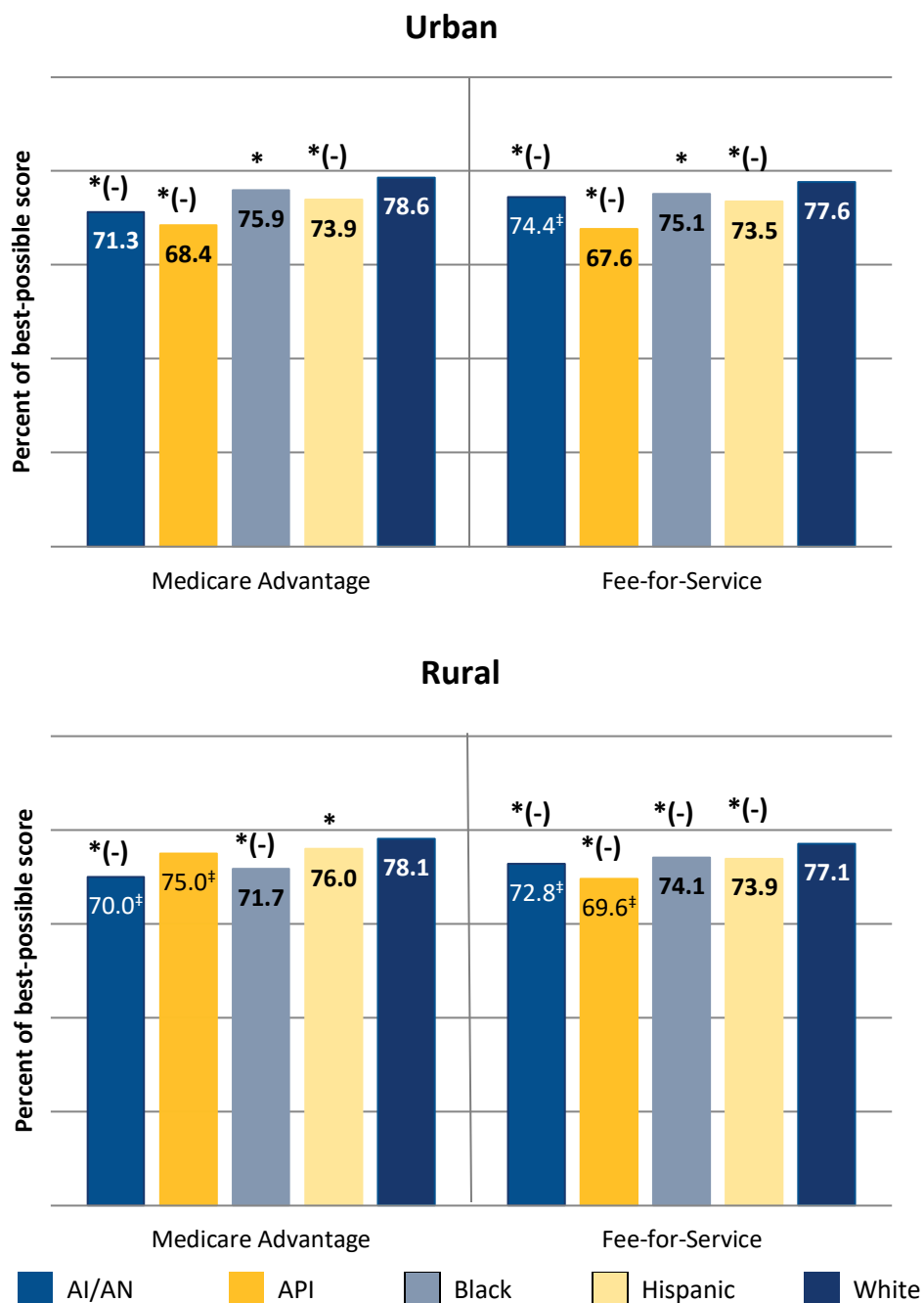
(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

<sup>†</sup> This includes how often in the last six months patients got appointments with specialists as soon as they needed them and how easy it was to get needed care, tests, or treatment.

## Patient Experience: Getting Appointments and Care Quickly

Percentage of the best possible score (on a 0–100 scale) earned on how quickly patients get appointments and care,<sup>†</sup> by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Data from the Medicare CAHPS survey, 2018.

**NOTES:** AI/AN = American Indian or Alaska Native. API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> This score is based on fewer than 400 completed measures, and thus its precision may be low.

Disparities

- In both MA and FFS, urban AI/AN beneficiaries reported worse experiences with getting appointments and care quickly than urban White beneficiaries. In each case, the difference between urban AI/AN and urban White beneficiaries was greater than 3 points on a 0–100 scale.
- In both MA and FFS, rural AI/AN beneficiaries reported worse experiences with getting appointments and care quickly than rural White beneficiaries. In each case, the difference between rural AI/AN and rural White beneficiaries was greater than 3 points on a 0–100 scale.
- In both MA and FFS, urban API beneficiaries reported worse experiences with getting appointments and care quickly than urban White beneficiaries. In each case, the difference between urban API and urban White beneficiaries was greater than 3 points on a 0–100 scale.
- Rural API MA beneficiaries reported experiences with getting appointments and care quickly that were similar to the experiences reported by rural White MA beneficiaries. Rural API FFS beneficiaries reported worse experiences with getting appointments and care quickly than rural White FFS beneficiaries. The difference between rural API and rural White FFS beneficiaries was greater than 3 points on a 0–100 scale.
- In both MA and FFS, urban Black beneficiaries reported worse experiences with getting appointments and care quickly than urban White beneficiaries. In each case, the difference between urban Black and urban White beneficiaries was less than 3 points on a 0–100 scale.
- In both MA and FFS, rural Black beneficiaries reported worse experiences with getting appointments and care quickly than rural White beneficiaries. In each case, the difference between rural Black and rural White beneficiaries was greater than 3 points on a 0–100 scale.
- In both MA and FFS, urban Hispanic beneficiaries reported worse experiences with getting appointments and care quickly than urban White beneficiaries. In each case, the difference between urban Hispanic and urban White beneficiaries was greater than 3 points on a 0–100 scale.
- In both MA and FFS, rural Hispanic beneficiaries reported worse experiences with getting appointments and care quickly than rural White beneficiaries. The difference between rural Hispanic and rural White MA beneficiaries was less than 3 points on a 0–100 scale. The difference between rural Hispanic and rural White FFS beneficiaries was greater than 3 points on a 0–100 scale.

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\* Significantly different from the score for White residents of the same locality and coverage type ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality and coverage type, the following symbols are also used when applicable:

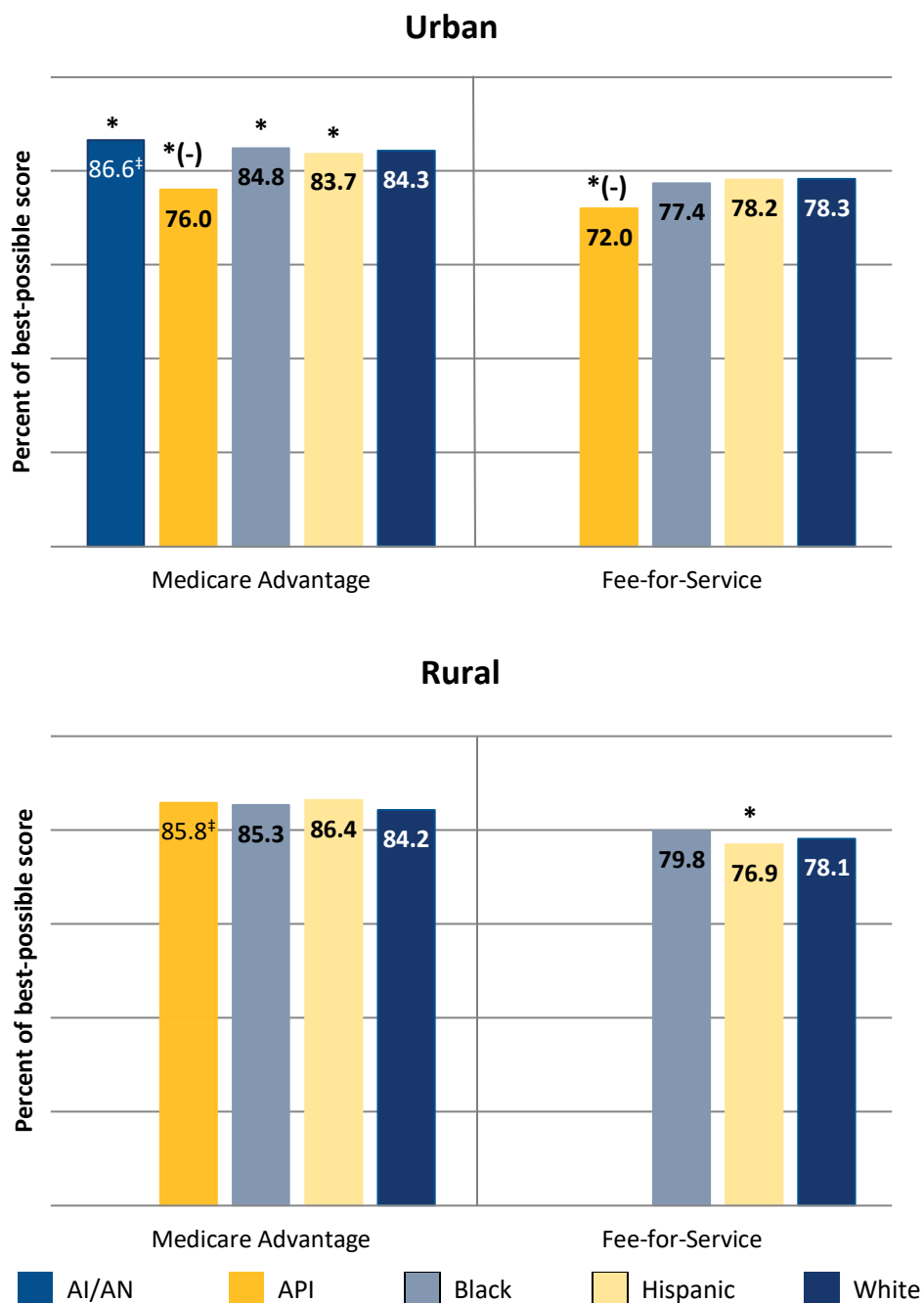
- (+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.
- (-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

<sup>†</sup> This includes how often in the last six months patients got care that was needed right away, as well as how easy it was to get appointments for checkups and routine care.



## Patient Experience: Customer Service

Percentage of the best possible score (on a 0–100 scale) earned on three aspects of customer service,<sup>†</sup> by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Data from the Medicare CAHPS survey, 2018.

**NOTES:** AI/AN = American Indian or Alaska Native. API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>‡</sup> This score is based on fewer than 400 completed measures, and thus its precision may be low.

<sup>#</sup> There were not enough data from urban AI/AN FFS beneficiaries, rural AI/AN MA beneficiaries, rural AI/AN FFS beneficiaries, or rural API FFS beneficiaries to compare these groups to Whites on this measure.

Disparities

- Urban AI/AN MA beneficiaries reported better experiences with customer service than urban White beneficiaries. The difference between urban AI/AN and urban White MA beneficiaries was greater than 3 points on a 0–100 scale. There were not enough data from urban AI/AN FFS beneficiaries to compare them to urban White FFS beneficiaries on this measure.
- There were not enough data from rural AI/AN MA or FFS beneficiaries to compare them to rural White beneficiaries on this measure.
- In both MA and FFS, urban API beneficiaries reported worse experiences with customer service than urban White beneficiaries. In each case, the difference between urban API and urban White beneficiaries was greater than 3 points on a 0–100 scale.
- Rural API MA beneficiaries reported experiences with customer service that were similar to the experiences reported by rural White MA beneficiaries. There were not enough data from rural API FFS beneficiaries to compare them to rural White FFS beneficiaries on this measure.
- Urban Black MA beneficiaries reported better experiences with customer service than urban White MA beneficiaries. The difference between urban Black and urban White MA beneficiaries was less than 3 points on a 0–100 scale. Urban Black FFS beneficiaries reported experiences with customer service that were similar to the experiences reported by urban White FFS beneficiaries.
- In both MA and FFS, rural Black beneficiaries reported experiences with customer service that were similar to the experiences reported by rural White beneficiaries.
- Urban Hispanic MA beneficiaries reported worse experiences with customer service than urban White MA beneficiaries. The difference between urban Hispanic and urban White MA beneficiaries was less than 3 points on a 0–100 scale. Urban Hispanic FFS beneficiaries reported experiences with customer service that were similar to the experiences reported by urban White FFS beneficiaries.
- Rural Hispanic MA beneficiaries reported experiences with customer service that were similar to the experiences reported by rural White MA beneficiaries. Rural Hispanic FFS beneficiaries reported worse experiences with customer service than rural White FFS beneficiaries. The difference between rural Hispanic and rural White FFS beneficiaries was less than 3 points on a 0–100 scale.

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\* Significantly different from the score for White residents of the same locality and coverage type ( $p < 0.05$ ).

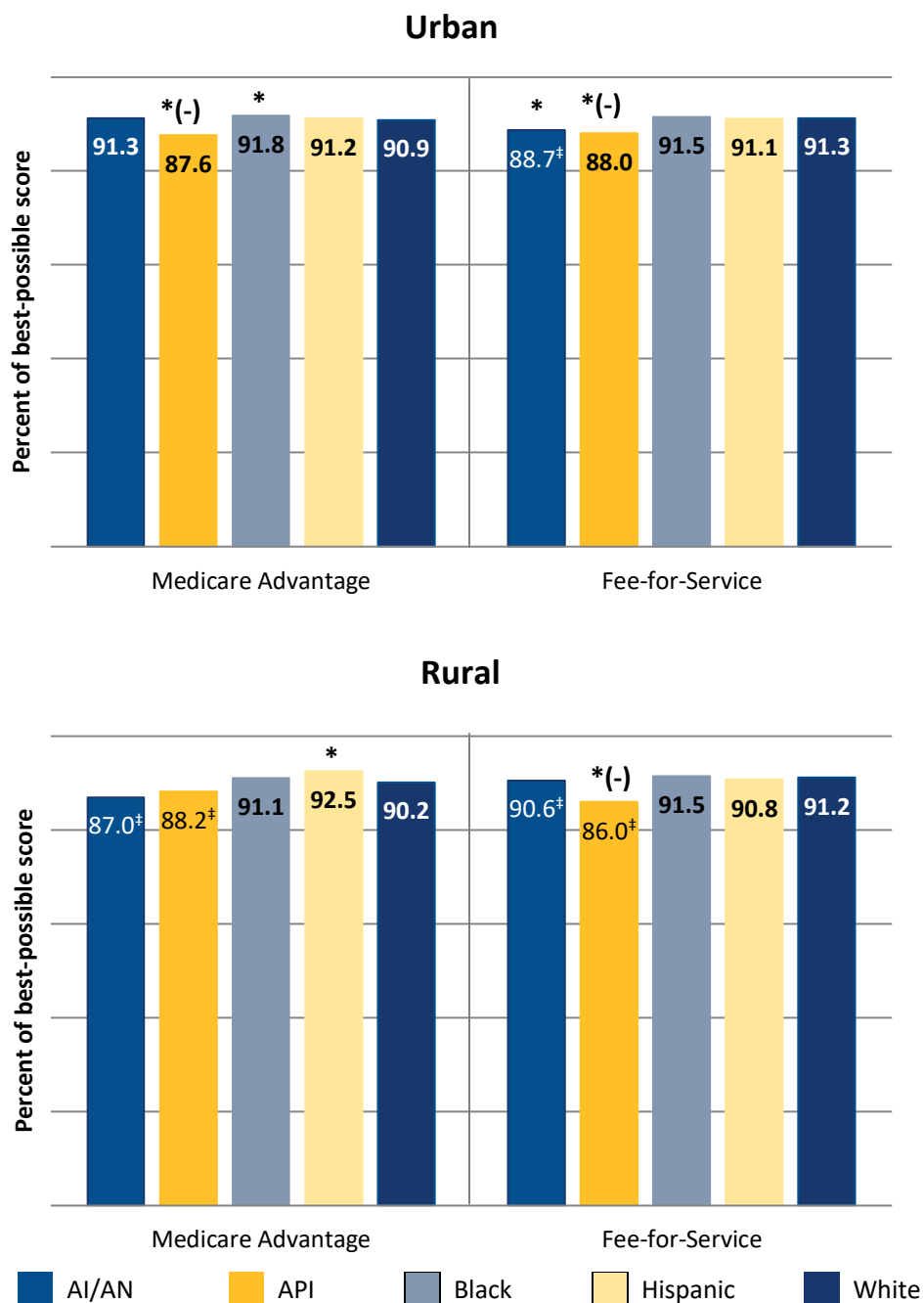
For statistically significant differences between Whites and racial or ethnic minorities of the same locality and coverage type, the following symbols are also used when applicable:

- (+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.
- (-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

<sup>†</sup> This includes how often in the last six months health plan customer service staff provided the information or help that beneficiaries needed, how often beneficiaries were treated with courtesy and respect, and how often forms from the health plan were easy to fill out.

## Patient Experience: Doctors Who Communicate Well

Percentage of the best possible score (on a 0–100 scale) earned on how well doctors communicate with patients,<sup>†</sup> by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Data from the Medicare CAHPS survey, 2018.

**NOTES:** AI/AN = American Indian or Alaska Native. API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> This score is based on fewer than 400 completed measures, and thus its precision may be low.

Disparities

- Urban AI/AN MA beneficiaries reported experiences with doctor communication that were similar to the experiences reported by urban White MA beneficiaries. Urban AI/AN FFS beneficiaries reported worse experiences with doctor communication than urban White FFS beneficiaries. The difference between urban AI/AN and urban White FFS beneficiaries was less than 3 points on a 0–100 scale.
- In both MA and FFS, rural AI/AN beneficiaries reported experiences with doctor communication that were similar to the experiences reported by rural White beneficiaries.
- In both MA and FFS, urban API beneficiaries reported worse experiences with doctor communication than urban White beneficiaries. In each case, the difference between urban API and urban White beneficiaries was greater than 3 points on a 0–100 scale.
- Rural API MA beneficiaries reported experiences with doctor communication that were similar to the experiences reported by rural White MA beneficiaries. Rural API FFS beneficiaries reported worse experiences with doctor communication than rural White FFS beneficiaries. The difference between rural API and rural White FFS beneficiaries was greater than 3 points on a 0–100 scale.
- Urban Black MA beneficiaries reported better experiences with doctor communication than urban White MA beneficiaries. The difference between urban Black and urban White MA beneficiaries was less than 3 points on a 0–100 scale. Urban Black FFS beneficiaries reported experiences with doctor communication that were similar to the experiences reported by urban White FFS beneficiaries.
- In both MA and FFS, rural Black beneficiaries reported experiences with doctor communication that were similar to the experiences reported by rural White beneficiaries.
- In both MA and FFS, urban Hispanic beneficiaries reported experiences with doctor communication that were similar to the experiences reported by urban White beneficiaries.
- Rural Hispanic MA beneficiaries reported better experiences with doctor communication than rural White MA beneficiaries. The difference between rural Hispanic and rural White MA beneficiaries was less than 3 points on a 0–100 scale. Rural Hispanic FFS beneficiaries reported experiences with doctor communication that were similar to the experiences reported by rural White FFS beneficiaries.

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\* Significantly different from the score for White residents of the same locality and coverage type ( $p < 0.05$ ).

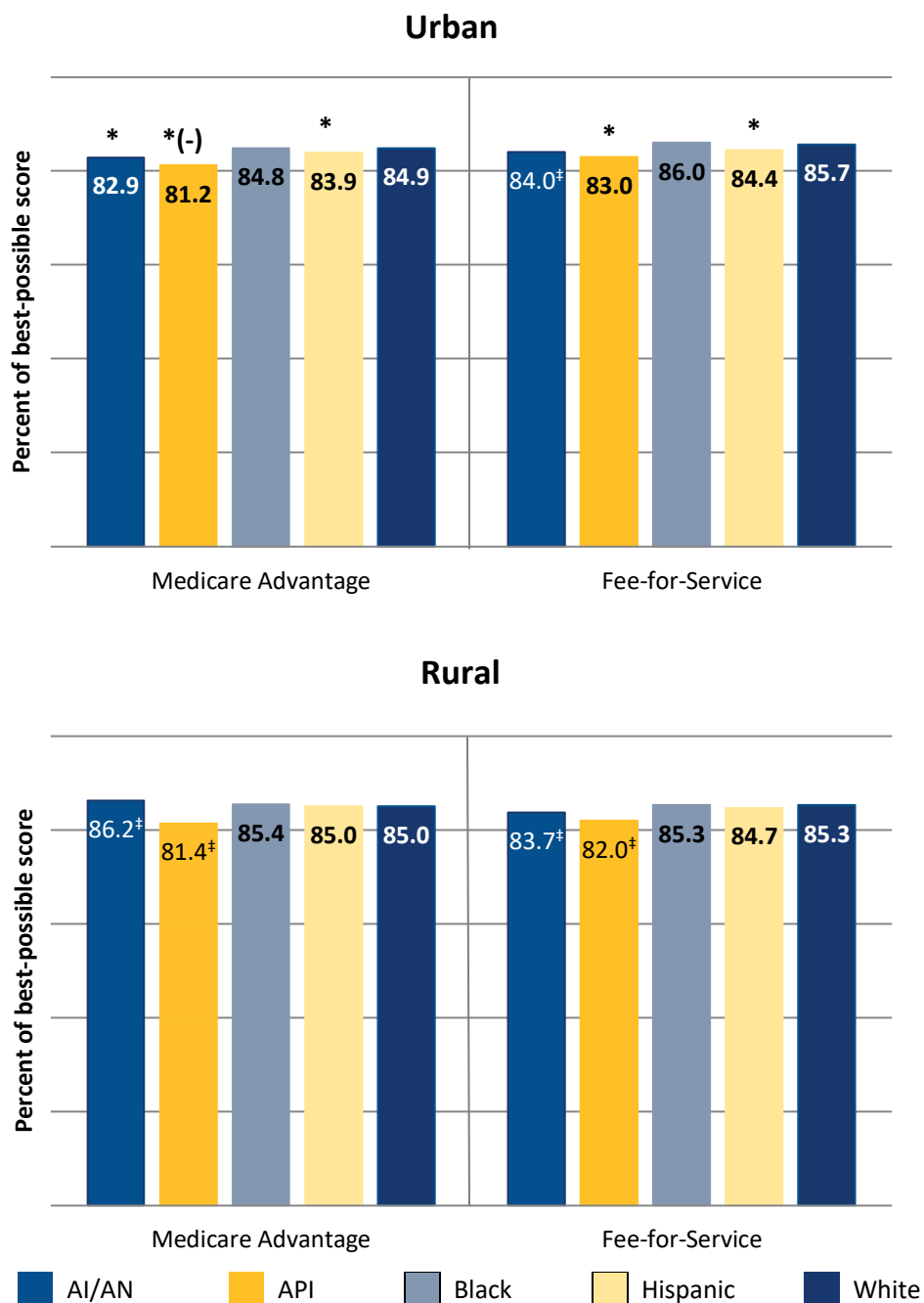
For statistically significant differences between Whites and racial or ethnic minorities of the same locality and coverage type, the following symbols are also used when applicable:

- (+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.
- (-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

<sup>†</sup> This includes how often in the last six months doctors explained things in a way that was easy to understand, listened carefully, showed respect for what patients had to say, and spent time with patients.

## Patient Experience: Care Coordination

Percentage of the best possible score (on a 0–100 scale) earned on how well patient care is coordinated,<sup>†</sup> by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Data from the Medicare CAHPS survey, 2018.

**NOTES:** AI/AN = American Indian or Alaska Native. API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>‡</sup> This score is based on fewer than 400 completed measures, and thus its precision may be low.



Disparities

- Urban AI/AN MA beneficiaries reported worse experiences with care coordination than urban White MA beneficiaries. The difference between urban AI/AN and urban White MA beneficiaries was less than 3 points on a 0–100 scale. Urban AI/AN FFS beneficiaries reported experiences with doctor communication that were similar to the experiences reported by urban White FFS beneficiaries.
- In both MA and FFS, rural AI/AN beneficiaries reported experiences with care coordination that were similar to the experiences reported by rural White beneficiaries.
- In both MA and FFS, urban API beneficiaries reported worse experiences with care coordination than urban White beneficiaries. The difference between urban API and urban White MA beneficiaries was greater than 3 points on a 0–100 scale. The difference between urban API and urban White FFS beneficiaries was less than 3 points on a 0–100 scale.
- In both MA and FFS, rural API beneficiaries reported experiences with care coordination that were similar to the experiences reported by rural White beneficiaries.
- In both MA and FFS, urban Black beneficiaries reported experiences with care coordination that were similar to the experiences reported by urban White beneficiaries.
- In both MA and FFS, rural Black beneficiaries reported experiences with care coordination that were similar to the experiences reported by rural White beneficiaries.
- In both MA and FFS, urban Hispanic beneficiaries reported worse experiences with care coordination than urban White beneficiaries. In each case, the difference between urban Hispanic and urban White beneficiaries was less than 3 points on a 0–100 scale.
- In both MA and FFS, rural Hispanic beneficiaries reported experiences with care coordination that were similar to the experiences reported by rural White beneficiaries.

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\* Significantly different from the score for White residents of the same locality and coverage type ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality and coverage type, the following symbols are also used when applicable:

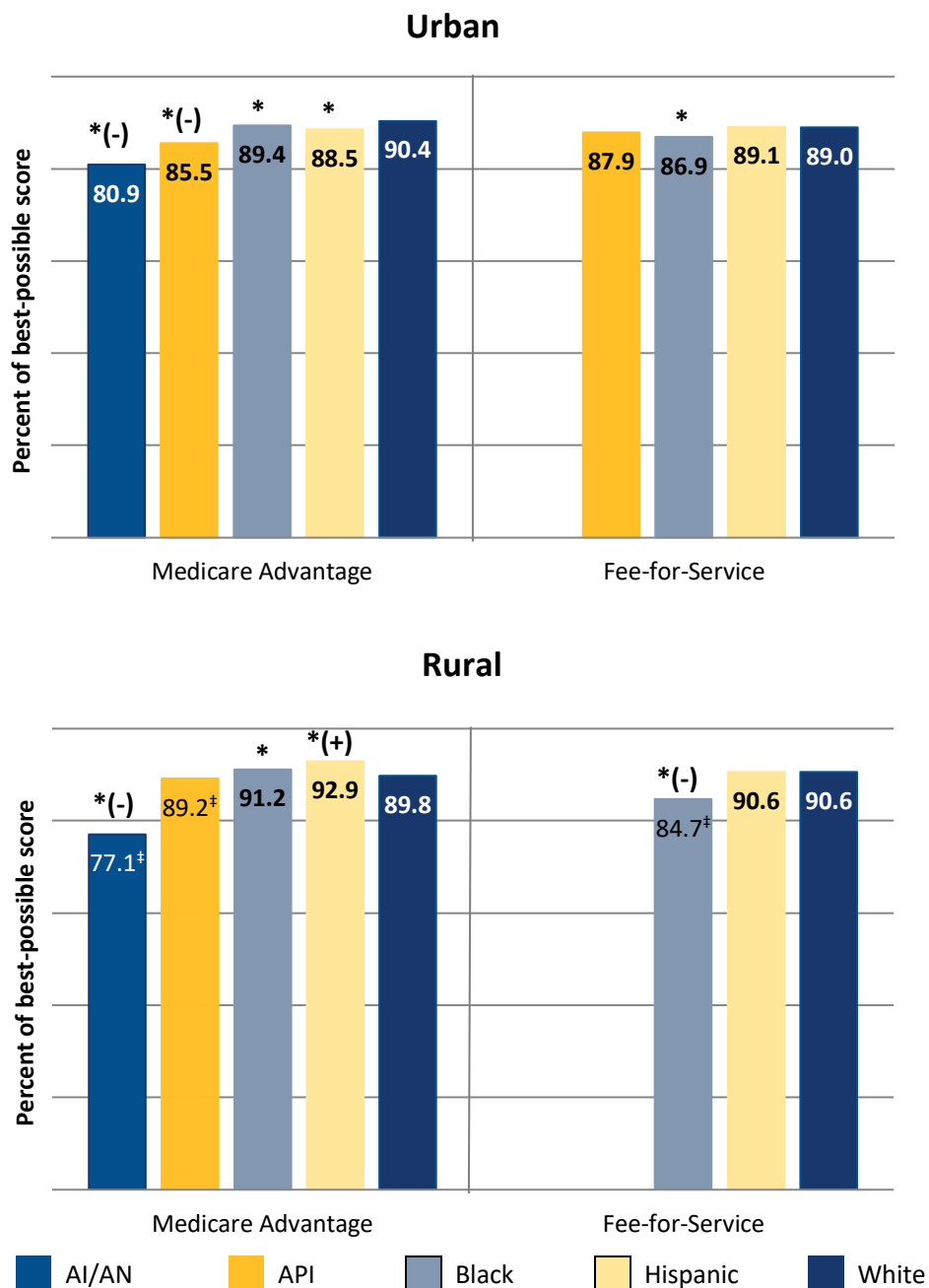
(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

<sup>†</sup> This includes how often in the last six months doctors had medical records and other information about patients' care at patients' scheduled appointments and how quickly patients received their test results.

## Patient Experience: Getting Needed Prescription Drugs

Percentage of the best possible score (on a 0–100 scale) earned on how easy it is for beneficiaries to get the prescription drugs they need using their plans,<sup>†</sup> by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Data from the Medicare CAHPS survey, 2018.

**NOTES:** AI/AN = American Indian or Alaska Native. API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>‡</sup> This score is based on fewer than 400 completed measures, and thus its precision may be low.

<sup>#</sup> There were not enough data from urban AI/AN FFS beneficiaries, rural AI/AN FFS beneficiaries, or rural API FFS beneficiaries to compare these groups to Whites on this measure.

Disparities

- Urban AI/AN MA beneficiaries reported worse experiences getting needed prescription drugs than urban White MA beneficiaries. The difference between urban AI/AN and urban White MA beneficiaries was greater than 3 points on a 0–100 scale. There were not enough data from urban AI/AN FFS beneficiaries to compare them to urban White FFS beneficiaries on this measure.
- Rural AI/AN MA beneficiaries reported worse experiences getting needed prescription drugs than rural White MA beneficiaries. The difference between rural AI/AN and rural White MA beneficiaries was greater than 3 points on a 0–100 scale. There were not enough data from rural AI/AN FFS beneficiaries to compare them to rural White FFS beneficiaries on this measure.
- Urban API MA beneficiaries reported worse experiences getting needed prescription drugs than urban White MA beneficiaries. The difference between urban API and urban White MA beneficiaries was greater than 3 points on a 0–100 scale. Urban API FFS beneficiaries reported experiences getting needed prescription drugs that were similar to the experiences reported by urban White FFS beneficiaries.
- Rural API MA beneficiaries reported experiences getting needed prescription drugs that were similar to the experiences reported by rural White MA beneficiaries. There were not enough data from rural API FFS beneficiaries to compare them to rural White FFS beneficiaries on this measure.
- In both MA and FFS, urban Black beneficiaries reported worse experiences getting needed prescription drugs than urban White beneficiaries. In each case, the difference between urban Black and urban White beneficiaries was less than 3 points on a 0–100 scale.
- Rural Black MA beneficiaries reported better experiences getting needed prescription drugs than rural White MA beneficiaries. The difference between rural Black and rural White MA beneficiaries was less than 3 points on a 0–100 scale. Rural Black FFS beneficiaries reported worse experiences getting needed prescription drugs than rural White FFS beneficiaries. The difference between rural Black and rural White FFS beneficiaries was greater than 3 points on a 0–100 scale.
- Urban Hispanic MA beneficiaries reported worse experiences getting needed prescription drugs than urban White MA beneficiaries. The difference between urban Hispanic and urban White MA beneficiaries was less than 3 points on a 0–100 scale. Urban Hispanic FFS beneficiaries reported experiences getting needed prescription drugs that were similar to the experiences reported by urban White FFS beneficiaries.
- Rural Hispanic MA beneficiaries reported better experiences getting needed prescription drugs than rural White MA beneficiaries. The difference between rural Hispanic and rural White MA beneficiaries was greater than 3 points on a 0–100 scale. Rural Hispanic FFS beneficiaries reported experiences getting needed prescription drugs that were similar to the experiences reported by rural White FFS beneficiaries.

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\* Significantly different from the score for White residents of the same locality and coverage type ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality and coverage type, the following symbols are also used when applicable:

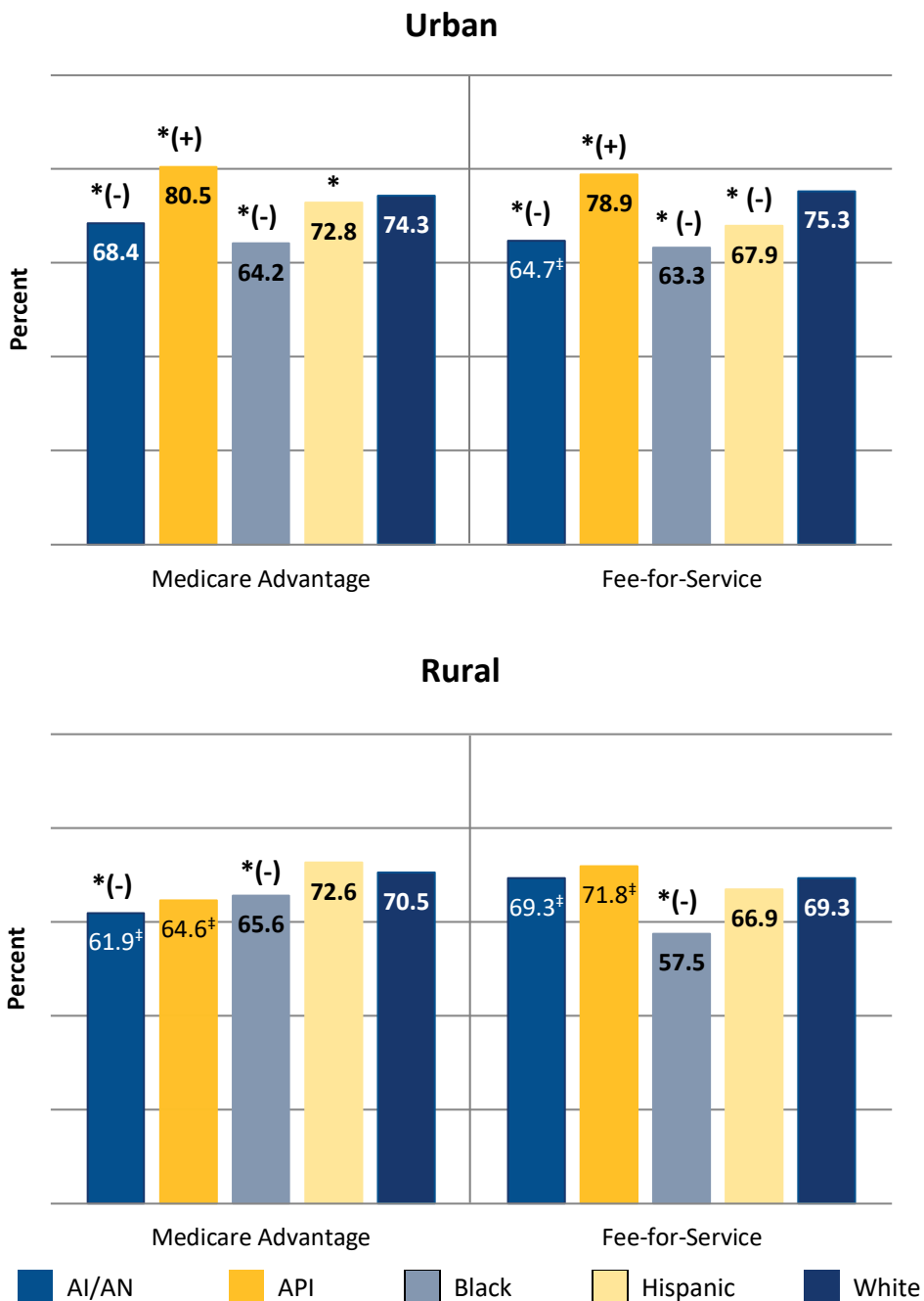
(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

<sup>†</sup> This includes how often in the last six months it was easy to use the plan to get prescribed medications and how easy it was to fill prescriptions at a pharmacy or by mail.

## Patient Experience: Annual Flu Vaccine

Percentage of Medicare enrollees who got a vaccine (flu shot),  
by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Data from the Medicare CAHPS survey, 2018.

**NOTES:** AI/AN = American Indian or Alaska Native. API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> This score is based on fewer than 400 completed measures, and thus its precision may be low.



Disparities

- In both MA and FFS, urban AI/AN beneficiaries were less likely than urban White beneficiaries to have received the flu vaccine. In each case, the difference between urban AI/AN and urban White beneficiaries was greater than 3 percentage points.
- Rural AI/AN MA beneficiaries were less likely than rural White MA beneficiaries to have received the flu vaccine. The difference between rural AI/AN and rural White MA beneficiaries was greater than 3 points on a 0–100 scale. Rural AI/AN FFS beneficiaries were about as likely as rural White FFS beneficiaries to have received the flu vaccine.
- In both MA and FFS, urban API beneficiaries were more likely than urban White beneficiaries to have received the flu vaccine. In each case, the difference between urban API and urban White beneficiaries was greater than 3 percentage points.
- In both MA and FFS, rural API beneficiaries were about as likely as rural White beneficiaries to have received the flu vaccine.
- In both MA and FFS, urban Black beneficiaries were less likely than urban White beneficiaries to have received the flu vaccine. In each case, the difference between urban Black and urban White beneficiaries was greater than 3 percentage points.
- In both MA and FFS, rural Black beneficiaries were less likely than rural White beneficiaries to have received the flu vaccine. In each case, the difference between rural Black and rural White beneficiaries was greater than 3 percentage points.
- In both MA and FFS, urban Hispanic beneficiaries were less likely than urban White beneficiaries to have received the flu vaccine. The difference between urban Hispanic and urban White MA beneficiaries was less than 3 percentage points. The difference between urban Hispanic and urban White FFS beneficiaries was greater than 3 percentage points.
- In both MA and FFS, rural Hispanic beneficiaries were about as likely as rural White beneficiaries to have received the flu vaccine.

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\* Significantly different from the score for White residents of the same locality and coverage type ( $p < 0.05$ ).

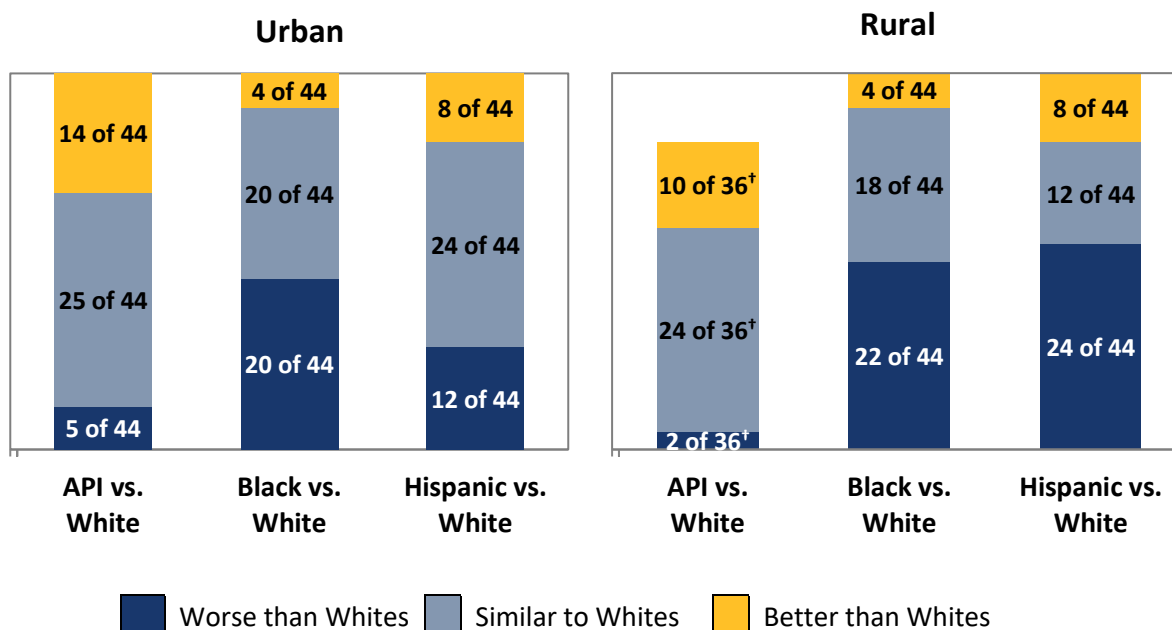
For statistically significant differences between Whites and racial or ethnic minorities of the same locality and coverage type, the following symbols are also used when applicable:

(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## Racial and Ethnic Disparities in Care Within Urban and Rural Areas: All Clinical Care Measures

Number of clinical care measures for which urban and rural residents of selected racial and ethnic minority groups experienced care that was worse than, similar to, or better than the care experienced by White urban and rural residents in 2018



**SOURCE:** This chart summarizes clinical quality (HEDIS) data collected in 2018 from MA plans nationwide.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> There was only enough data from rural API beneficiaries to make rural-urban comparisons on 36 of the 44 clinical care measures.

### Urban Asians and Pacific Islanders received worse care than urban Whites

- Controlling high blood pressure
- Antidepressant medication management—acute phase treatment
- Antidepressant medication management—continuation phase treatment
- Initiation of alcohol and other drug dependence treatment
- Transitions of care—medication reconciliation after inpatient discharge

**Urban Asians and Pacific Islanders received better care than urban Whites**

- Breast cancer screening
- Colorectal cancer screening
- Pharmacotherapy management of COPD exacerbation—use of bronchodilators
- Diabetes care—eye exam
- Diabetes care—blood pressure controlled
- Diabetes care—blood sugar controlled
- Statin use in patients with diabetes
- Osteoporosis management in women who had a fracture
- Follow-up after hospital stay for mental illness (within seven days of discharge)
- Follow-up after hospital stay for mental illness (within 30 days of discharge)
- Avoiding potentially harmful drug-disease interactions in elderly patients with dementia
- Avoiding potentially harmful drug-disease interactions in elderly patients with a history of falls
- Avoiding use of high-risk medication in the elderly
- Avoiding use of opioids at high dosage

**Urban Blacks received worse care than urban Whites**

- Controlling high blood pressure
- Continuous beta-blocker treatment after a heart attack
- Medication adherence for cardiovascular disease—statins
- Diabetes care—blood pressure controlled
- Diabetes care—blood sugar controlled
- Medication adherence for diabetes—statins
- Antidepressant medication management—acute phase treatment
- Antidepressant medication management—continuation phase treatment
- Follow-up after hospital stay for mental illness (within seven days of discharge)
- Follow-up after hospital stay for mental illness (within 30 days of discharge)
- Follow-up after emergency department visit for mental illness (within seven days of discharge)
- Follow-up after emergency department visit for mental illness (within 30 days of discharge)
- Follow-up after emergency department visit for alcohol and other drug abuse or dependence (within seven days of discharge)
- Follow-up after emergency department visit for alcohol and other drug abuse or dependence (within 30 days of discharge)
- Medication reconciliation after hospital discharge
- Transitions of care—notification of inpatient admission
- Transitions of care—patient engagement after inpatient discharge
- Transitions of care—medication reconciliation after inpatient discharge
- Follow-up after emergency department visit for people with high-risk multiple chronic conditions
- Avoiding potentially harmful drug-disease interactions in elderly patients with chronic renal failure

**Urban Blacks received better care than urban Whites**

- Breast cancer screening
- Initiation of alcohol and other drug dependence treatment
- Avoiding potentially harmful drug-disease interactions in elderly patients with dementia
- Avoiding potentially harmful drug-disease interactions in elderly patients with a history of falls

**Urban Hispanics received worse care than urban Whites**

- Controlling high blood pressure
- Medication adherence for cardiovascular disease—statins
- Medication adherence for diabetes—statins
- Antidepressant medication management—acute phase treatment
- Antidepressant medication management—continuation phase treatment
- Initiation of alcohol and other drug dependence treatment
- Transitions of care—notification of inpatient admission
- Transitions of care—medication reconciliation after inpatient discharge
- Avoiding potentially harmful drug-disease interactions in elderly patients with chronic renal failure
- Avoiding potentially harmful drug-disease interactions in elderly patients with dementia
- Avoiding use of opioids from multiple pharmacies
- Avoiding use of opioids from multiple prescribers and pharmacies

**Urban Hispanics received better care than urban Whites**

- Breast cancer screening
- Testing to confirm COPD
- Pharmacotherapy management of COPD exacerbation—use of bronchodilators
- Diabetes care—eye exam
- Diabetes care—blood pressure controlled
- Statin use in patients with diabetes
- Osteoporosis management in women who had a fracture
- Transitions of care—patient engagement after inpatient discharge

**Rural Asians and Pacific Islanders received worse care than rural Whites**

- Antidepressant medication management—acute phase treatment
- Antidepressant medication management—continuation phase treatment

**Rural Asians and Pacific Islanders received better care than rural Whites**

- Breast cancer screening
- Colorectal cancer screening
- Pharmacotherapy management of COPD exacerbation—use of bronchodilators
- Diabetes care—eye exam
- Statin use in patients with diabetes
- Transitions of care—patient engagement after inpatient discharge
- Transitions of care—medication reconciliation after inpatient discharge
- Avoiding potentially harmful drug-disease interactions in elderly patients with dementia
- Avoiding potentially harmful drug-disease interactions in elderly patients with a history of falls
- Avoiding use of high-risk medications in the elderly

**Rural Blacks received worse care than rural Whites**

- Pharmacotherapy management of COPD exacerbation—systemic corticosteroid
- Controlling high blood pressure
- Continuous beta-blocker treatment after a heart attack
- Medication adherence for cardiovascular disease—statins
- Diabetes care—blood pressure controlled
- Diabetes care—blood sugar controlled
- Medication adherence for diabetes—statins
- Antidepressant medication management—acute phase treatment
- Antidepressant medication management—continuation phase treatment
- Follow-up after hospital stay for mental illness (within seven days of discharge)
- Follow-up after hospital stay for mental illness (within 30 days of discharge)
- Follow-up after emergency department visit for mental illness (within seven days of discharge)
- Follow-up after emergency department visit for mental illness (within 30 days of discharge)
- Follow-up after emergency department visit for alcohol and other drug abuse or dependence (within seven days of discharge)
- Follow-up after emergency department visit for alcohol and other drug abuse or dependence (within 30 days of discharge)
- Initiation of alcohol and other drug dependence treatment
- Medication reconciliation after hospital discharge
- Transitions of care—notification of inpatient admission
- Transitions of care—receipt of discharge information
- Transitions of care—medication reconciliation after inpatient discharge
- Follow-up after emergency department visit for people with high-risk multiple chronic conditions
- Avoiding potentially harmful drug-disease interactions in elderly patients with chronic renal failure

**Rural Blacks received better care than rural Whites**

- Breast cancer screening
- Colorectal cancer screening
- Avoiding potentially harmful drug-disease interactions in elderly patients with a history of falls
- Avoiding opioid use at high dosage



**Rural Hispanics received worse care than rural Whites**

- Adult body mass index assessment
- Pharmacotherapy management of COPD exacerbation—systemic corticosteroid
- Pharmacotherapy management of COPD exacerbation—bronchodilator
- Controlling high blood pressure
- Continuous beta-blocker treatment after a heart attack
- Medication adherence for cardiovascular disease—statins
- Diabetes care—blood sugar controlled
- Medication adherence for diabetes—statins
- Antidepressant medication management—acute phase treatment
- Antidepressant medication management—continuation phase treatment
- Follow-up after emergency department visit for mental illness (within seven days of discharge)
- Follow-up after emergency department visit for alcohol and other drug abuse or dependence (within seven days of discharge)
- Follow-up after emergency department visit for alcohol and other drug abuse or dependence (within 30 days of discharge)
- Initiation of alcohol and other drug dependence treatment
- Medication reconciliation after hospital discharge
- Transitions of care—notification of inpatient admission
- Transitions of care—receipt of discharge information
- Transitions of care—patient engagement after inpatient discharge
- Transitions of care—medication reconciliation after inpatient discharge
- Follow-up after emergency department visit for people with high-risk multiple chronic conditions
- Avoiding potentially harmful drug-disease interactions in elderly patients with chronic renal failure
- Avoiding potentially harmful drug-disease interactions in elderly patients with dementia
- Avoiding potentially harmful drug-disease interactions in elderly patients with a history of falls
- Avoiding use of opioids from multiple pharmacies

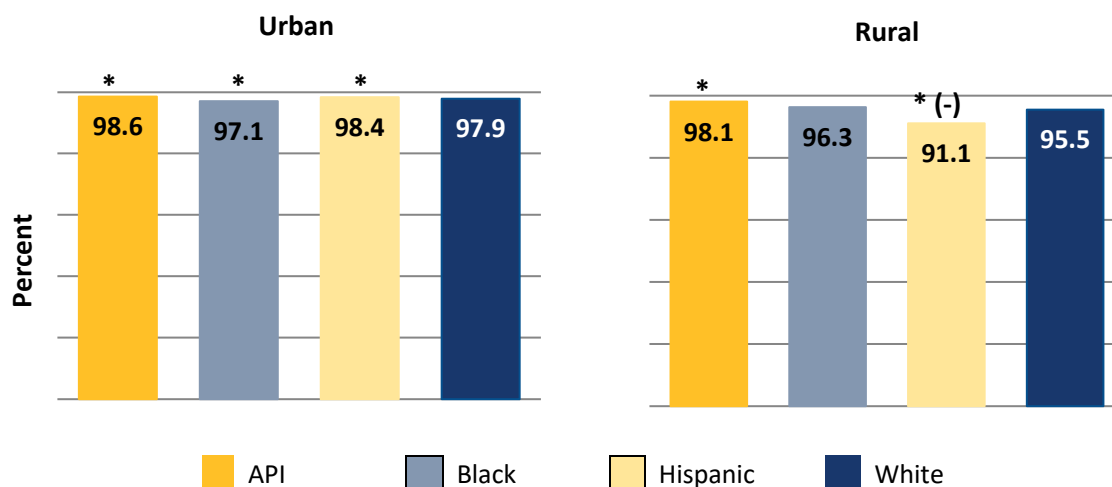
**Rural Hispanics received better care than rural Whites**

- Breast cancer screening
- Diabetes care—kidney disease monitoring
- Diabetes care—blood pressure controlled
- Osteoporosis management in women who had a fracture
- Follow-up after hospital stay for mental illness (within seven days of discharge)
- Follow-up after hospital stay for mental illness (within 30 days of discharge)
- Avoiding use of opioids at high dosage
- Avoiding use of opioids from multiple prescribers

## Clinical Care: Prevention and Screening

### Adult BMI Assessment

Percentage of MA enrollees aged 18 to 74 years who had an outpatient visit whose body mass index (BMI) was documented in the past two years, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Urban API beneficiaries were more likely than urban White beneficiaries to have had their BMIs documented. The difference between urban API and urban White beneficiaries was less than 3 percentage points. Rural API beneficiaries were more likely than rural White beneficiaries to have had their BMIs documented. The difference between rural API and rural White beneficiaries was less than 3 percentage points.
- Urban Black beneficiaries were less likely than urban White beneficiaries to have had their BMIs documented. The difference between urban Black and urban White beneficiaries was less than 3 percentage points. Rural Black beneficiaries were about as likely as rural White beneficiaries to have had their BMIs documented.
- Urban Hispanic beneficiaries were more likely than urban White beneficiaries to have had their BMIs documented. The difference between urban Hispanic and urban White beneficiaries was less than 3 percentage points. Rural Hispanic beneficiaries were less likely than rural White beneficiaries to have had their BMIs documented. The difference between rural Hispanic and rural White beneficiaries was greater than 3 percentage points.

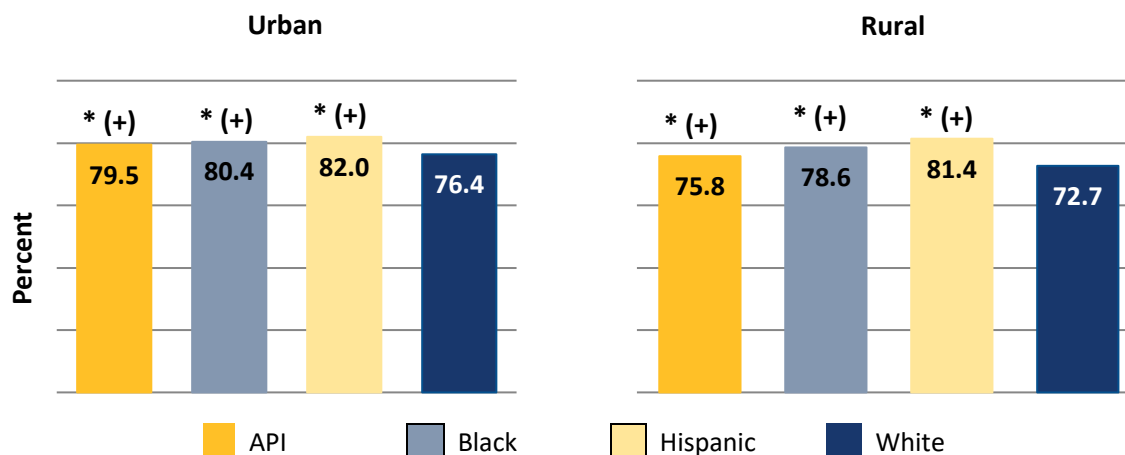
\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

- (+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.
- (-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## Breast Cancer Screening

Percentage of MA enrollees (women) aged 50 to 74 years who had appropriate screening for breast cancer, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Urban API women were more likely than urban White women to have been appropriately screened for breast cancer. The difference between urban API and urban White women was greater than 3 percentage points. Rural API women were more likely than rural White women to have been appropriately screened for breast cancer. The difference between rural API and rural White women was greater than 3 percentage points.
- Urban Black women were more likely than urban White women to have been appropriately screened for breast cancer. The difference between urban Black and urban White women was greater than 3 percentage points. Rural Black women were more likely than rural White women to have been appropriately screened for breast cancer. The difference between rural Black and rural White women was greater than 3 percentage points.
- Urban Hispanic women were more likely than urban White women to have been appropriately screened for breast cancer. The difference between urban Hispanic and urban White women was greater than 3 percentage points. Rural Hispanic women were more likely than rural White women to have been appropriately screened for breast cancer. The difference between rural Hispanic and rural White women was greater than 3 percentage points.

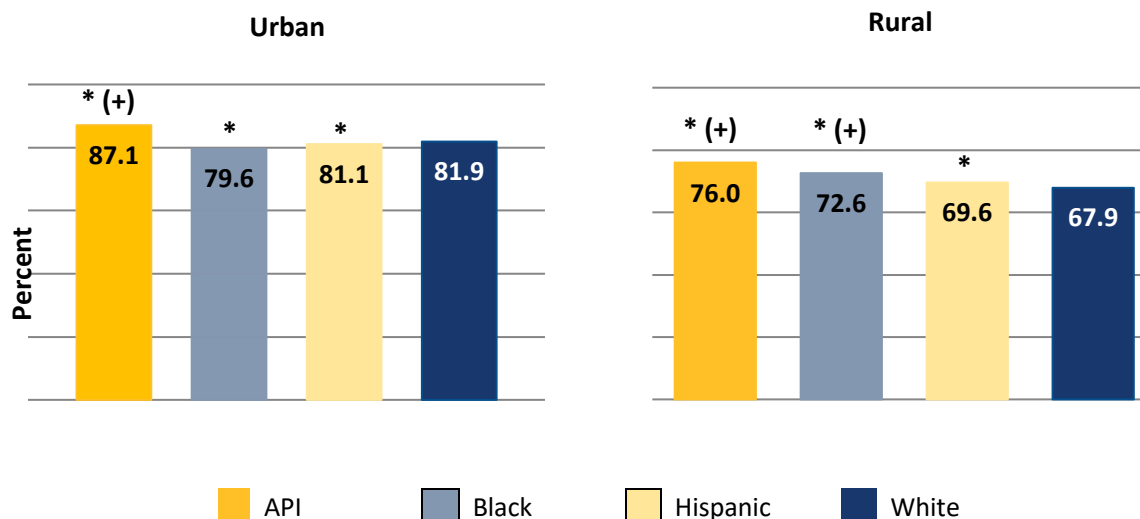
\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

- (+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.
- (-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## Colorectal Cancer Screening

Percentage of MA enrollees aged 50 to 75 years who had appropriate screening for colorectal cancer, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Urban API beneficiaries were more likely than urban White beneficiaries to have been appropriately screened for colorectal cancer. The difference between urban API and urban White beneficiaries was greater than 3 percentage points. Rural API beneficiaries were more likely than rural White beneficiaries to have been appropriately screened for colorectal cancer. The difference between rural API and rural White beneficiaries was greater than 3 percentage points.
- Urban Black beneficiaries were less likely than urban White beneficiaries to have been appropriately screened for colorectal cancer. The difference between urban Black and urban White beneficiaries was less than 3 percentage points. Rural Black beneficiaries were more likely than rural White beneficiaries to have been appropriately screened for colorectal cancer. The difference between rural Black and rural White beneficiaries was greater than 3 percentage points.
- Urban Hispanic beneficiaries were less likely than urban White beneficiaries to have been appropriately screened for colorectal cancer. The difference between urban Hispanic and urban White beneficiaries was less than 3 percentage points. Rural Hispanic beneficiaries were more likely than rural White beneficiaries to have been appropriately screened for colorectal cancer. The difference between rural Hispanic and rural White beneficiaries was less than 3 percentage points.

\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

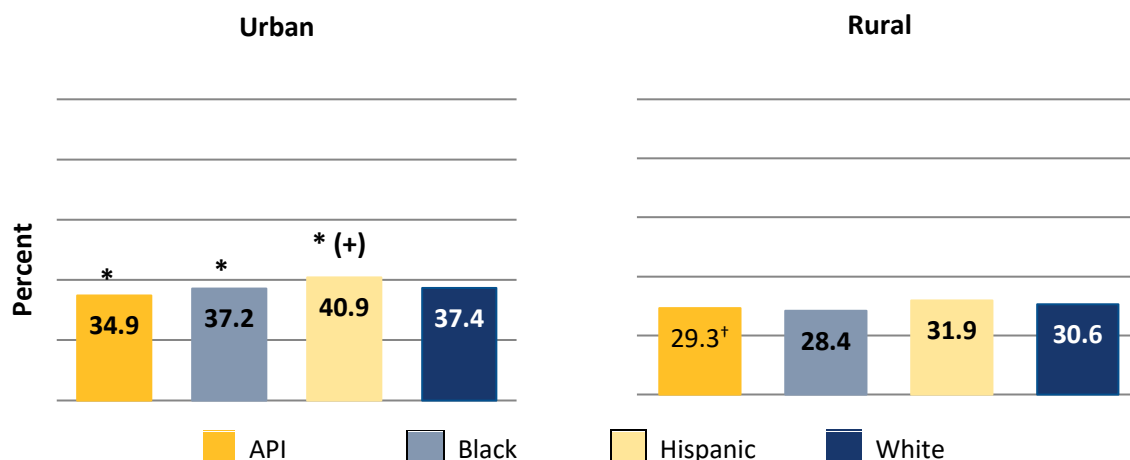
(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## Clinical Care: Respiratory Conditions

### Testing to Confirm COPD

**Percentage of MA enrollees aged 40 years and older with a new diagnosis of chronic obstructive pulmonary disease (COPD) or newly active COPD who received appropriate spirometry testing to confirm the diagnosis, by race and ethnicity within urban and rural areas, 2018**



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> This score is based on fewer than 400 completed measures, and thus its precision may be low.

### Disparities

- Urban API beneficiaries with a new diagnosis of COPD or newly active COPD were less likely than urban White beneficiaries with a new diagnosis of COPD or newly active COPD to have received a spirometry test to confirm the diagnosis. The difference between urban API and urban White beneficiaries was less than 3 percentage points. Rural API beneficiaries with a new diagnosis of COPD or newly active COPD were about as likely as rural White beneficiaries with a new diagnosis of COPD or newly active COPD to have received a spirometry test to confirm the diagnosis.
- Urban Black beneficiaries with a new diagnosis of COPD or newly active COPD were less likely than urban White beneficiaries with a new diagnosis of COPD or newly active COPD to have received a spirometry test to confirm the diagnosis. The difference between urban Black and urban White beneficiaries was less than 3 percentage points. Rural Black beneficiaries with a new diagnosis of COPD or newly active COPD were about as likely as rural White beneficiaries with a new diagnosis of COPD or newly active COPD to have received a spirometry test to confirm the diagnosis.
- Urban Hispanic beneficiaries with a new diagnosis of COPD or newly active COPD were more likely than urban White beneficiaries with a new diagnosis of COPD or newly active COPD to have received a spirometry test to confirm the diagnosis. The difference between urban Hispanic and urban White beneficiaries was greater than 3 percentage points. Rural Hispanic beneficiaries with a new diagnosis of COPD or newly active COPD were about as likely as rural White beneficiaries with a new diagnosis of COPD or newly active COPD to have received a spirometry test to confirm the diagnosis.



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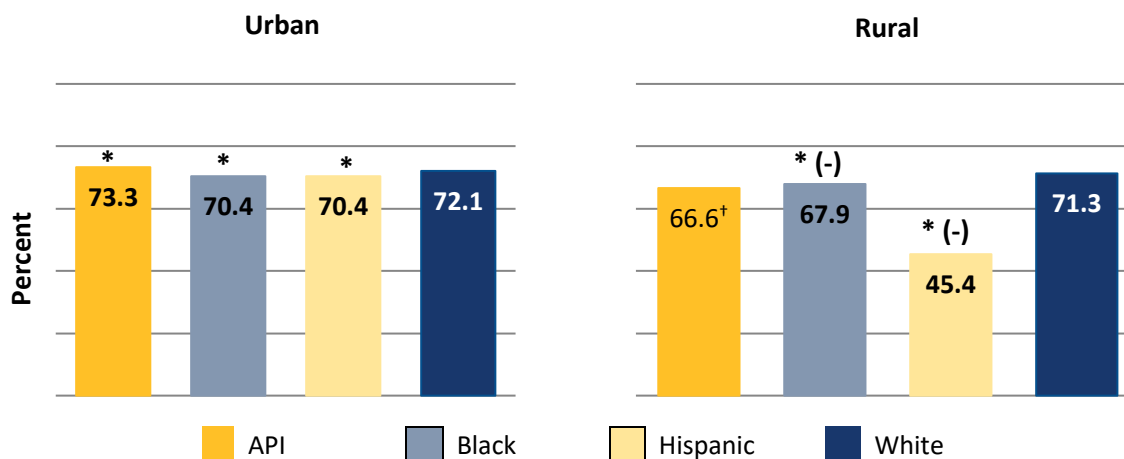
\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

- (+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.
- (-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## Clinical Care: Pharmacotherapy Management of COPD Exacerbation—Systemic Corticosteroid

Percentage of MA enrollees aged 40 years and older who had an acute inpatient discharge or emergency department encounter for COPD exacerbation in the past year who were dispensed a systemic corticosteroid within 14 days of the event, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> This score is based on fewer than 400 completed measures, and thus its precision may be low.

### Disparities

- Urban API beneficiaries who experienced a COPD exacerbation were more likely than urban White beneficiaries who experienced a COPD exacerbation to have been dispensed a systemic corticosteroid within 14 days of the event. The difference between urban API and urban White beneficiaries was less than 3 percentage points. Rural API beneficiaries who experienced a COPD exacerbation were about as likely as rural White beneficiaries who experienced a COPD exacerbation to have been dispensed a systemic corticosteroid within 14 days of the event.
- Urban Black beneficiaries who experienced a COPD exacerbation were less likely than urban White beneficiaries who experienced a COPD exacerbation to have been dispensed a systemic corticosteroid within 14 days of the event. The difference between urban Black and urban White beneficiaries was less than 3 percentage points. Rural Black beneficiaries who experienced a COPD exacerbation were less likely than rural White beneficiaries who experienced a COPD exacerbation to have been dispensed a systemic corticosteroid within 14 days of the event. The difference between rural Black and rural White beneficiaries was greater than 3 percentage points.
- Urban Hispanic beneficiaries who experienced a COPD exacerbation were less likely than urban White beneficiaries who experienced a COPD exacerbation to have been dispensed a systemic corticosteroid within 14 days of the event. The difference between urban Hispanic and urban White beneficiaries was less than 3 percentage points. Rural Hispanic beneficiaries who experienced a COPD exacerbation were less likely than rural White

beneficiaries who experienced a COPD exacerbation to have been dispensed a systemic corticosteroid within 14 days of the event. The difference between rural Hispanic and rural White beneficiaries was greater than 3 percentage points.

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\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

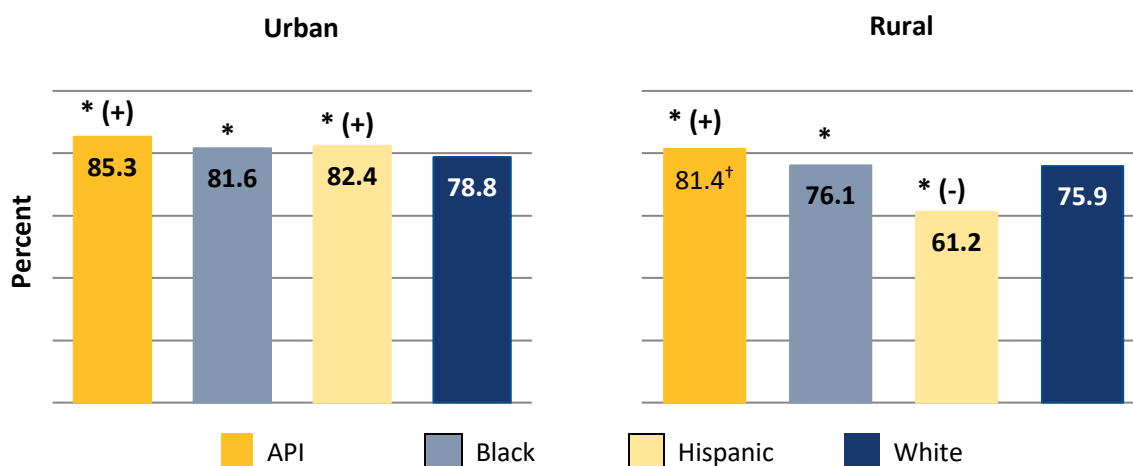
For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## Clinical Care: Pharmacotherapy Management of COPD Exacerbation—Bronchodilator

Percentage of MA enrollees aged 40 years and older who had an acute inpatient discharge or emergency department encounter for COPD exacerbation in the past year who were dispensed a bronchodilator within 30 days of experiencing the event, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> This score is based on fewer than 400 completed measures, and thus its precision may be low.

### Disparities

- Urban API beneficiaries who experienced a COPD exacerbation were more likely than urban White beneficiaries who experienced a COPD exacerbation to have been dispensed a bronchodilator within 30 days of the event. The difference between urban API and urban White beneficiaries was greater than 3 percentage points. Rural API beneficiaries who experienced a COPD exacerbation were more likely than rural White beneficiaries who experienced a COPD exacerbation to have been dispensed a bronchodilator within 30 days of the event. The difference between rural API and rural White beneficiaries was greater than 3 percentage points.
- Urban Black beneficiaries who experienced a COPD exacerbation were more likely than urban White beneficiaries who experienced a COPD exacerbation to have been dispensed a bronchodilator within 30 days of the event. The difference between urban Black and urban White beneficiaries was less than 3 percentage points. Rural Black beneficiaries who experienced a COPD exacerbation were more likely than rural White beneficiaries who experienced a COPD exacerbation to have been dispensed a bronchodilator within 30 days of the event. The difference between rural Black and rural White beneficiaries was less than 3 percentage points.
- Urban Hispanic beneficiaries who experienced a COPD exacerbation were more likely than urban White beneficiaries who experienced a COPD exacerbation to have been dispensed a bronchodilator within 30 days of the event. The difference between urban Hispanic and

urban White beneficiaries was greater than 3 percentage points. Rural Hispanic beneficiaries who experienced a COPD exacerbation were less likely than rural White beneficiaries who experienced a COPD exacerbation to have been dispensed a bronchodilator within 30 days of the event. The difference between rural Hispanic and rural White beneficiaries was greater than 3 percentage points.

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\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

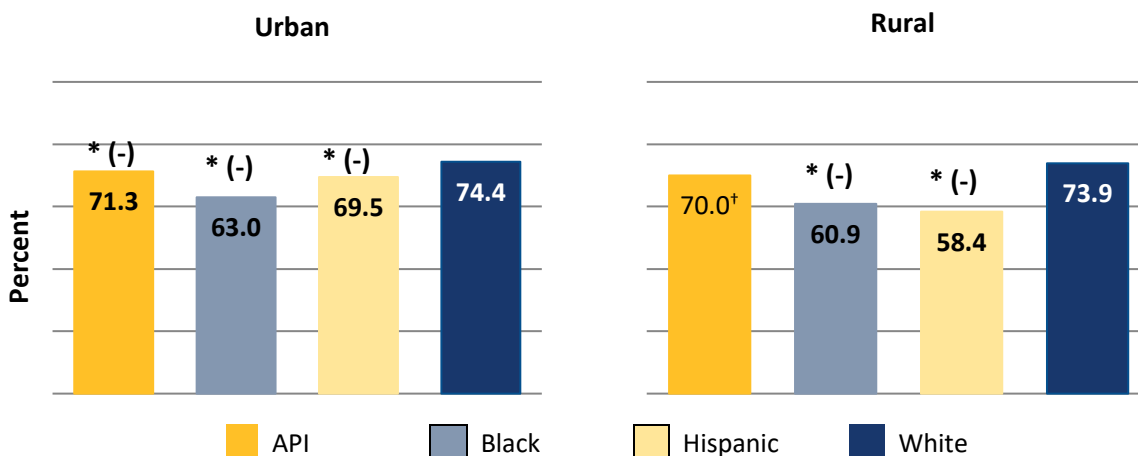
- (+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.
- (-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.



## Clinical Care: Cardiovascular Conditions

### Controlling High Blood Pressure

Percentage of MA enrollees aged 18 to 85 years who had a diagnosis of hypertension whose blood pressure was adequately controlled<sup>†</sup> during the past year, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> This score is based on fewer than 400 completed measures, and thus its precision may be low.

### Disparities

- Urban API beneficiaries who had a diagnosis of hypertension were less likely than urban White beneficiaries who had a diagnosis of hypertension to have had their blood pressure adequately controlled. The difference between urban API and urban White beneficiaries was greater than 3 percentage points. Rural API beneficiaries who had a diagnosis of hypertension were about as likely as rural White beneficiaries who had a diagnosis of hypertension to have had their blood pressure adequately controlled.
- Urban Black beneficiaries who had a diagnosis of hypertension were less likely than urban White beneficiaries who had a diagnosis of hypertension to have had their blood pressure adequately controlled. The difference between urban Black and urban White beneficiaries was greater than 3 percentage points. Rural Black beneficiaries who had a diagnosis of hypertension were less likely than rural White beneficiaries who had a diagnosis of hypertension to have had their blood pressure adequately controlled. The difference between rural Black and rural White beneficiaries was greater than 3 percentage points.
- Urban Hispanic beneficiaries who had a diagnosis of hypertension were less likely than urban White beneficiaries who had a diagnosis of hypertension to have had their blood pressure adequately controlled. The difference between urban Hispanic and urban White beneficiaries was greater than 3 percentage points. Rural Hispanic beneficiaries who had a diagnosis of hypertension were less likely than rural White beneficiaries who had a diagnosis of hypertension to have had their blood pressure adequately controlled. The

difference between rural Hispanic and rural White beneficiaries was greater than 3 percentage points.

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\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

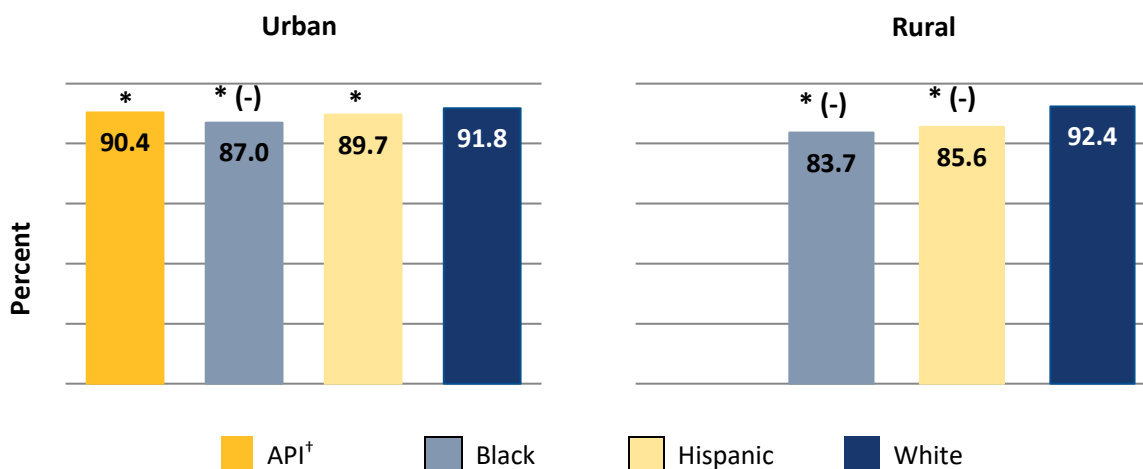
(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

<sup>†</sup> Less than 140/90 for enrollees 18 to 59 years of age and for enrollees 60 to 85 years of age with a diagnosis of diabetes, or less than 150/90 for members 60 to 85 years of age without a diagnosis of diabetes.

## Continuous Beta-Blocker Treatment

Percentage of MA enrollees aged 18 years and older who were hospitalized and discharged alive with a diagnosis of acute myocardial infarction (AMI) who received persistent beta-blocker treatment for six months after discharge, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> There were not enough data from rural API beneficiaries to compare them to Whites on this measure.

### Disparities

- Urban API beneficiaries who were hospitalized for a heart attack were less likely than urban White beneficiaries who were hospitalized for a heart attack to have received persistent beta-blocker treatment. The difference between urban API and urban White beneficiaries was less than 3 percentage points. There were not enough data from rural API beneficiaries to compare them to rural White beneficiaries on this measure.
- Urban Black beneficiaries who were hospitalized for a heart attack were less likely than urban White beneficiaries who were hospitalized for a heart attack to have received persistent beta-blocker treatment. The difference between urban Black and urban White beneficiaries was greater than 3 percentage points. Rural Black beneficiaries who were hospitalized for a heart attack were less likely than rural White beneficiaries who were hospitalized for a heart attack to have received persistent beta-blocker treatment. The difference between rural Black and rural White beneficiaries was greater than 3 percentage points.
- Urban Hispanic beneficiaries who were hospitalized for a heart attack were less likely than urban White beneficiaries who were hospitalized for a heart attack to have received persistent beta-blocker treatment. The difference between urban Hispanic and urban White beneficiaries was less than 3 percentage points. Rural Hispanic beneficiaries who were hospitalized for a heart attack were less likely than rural White beneficiaries who were hospitalized for a heart attack to have received persistent beta-blocker treatment. The difference between rural Hispanic and rural White beneficiaries was greater than 3 percentage points.

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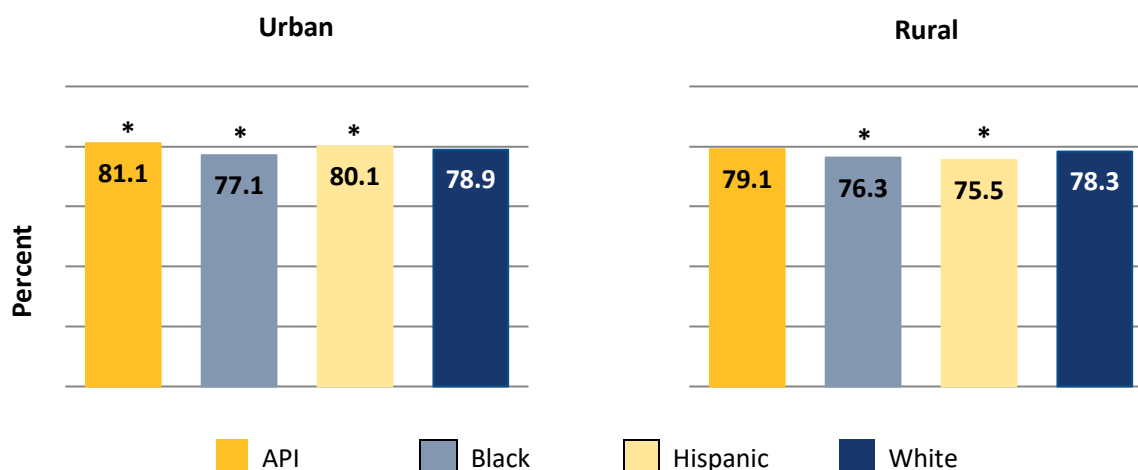
\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

- (+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.
- (-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## Statin Use in Patients with Cardiovascular Disease

Percentage of male MA enrollees aged 21 to 75 years and female MA enrollees aged 40 to 75 years with clinical atherosclerotic cardiovascular disease (ASCVD) who received statin therapy, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Urban API beneficiaries with ASCVD were more likely than urban White beneficiaries with ASCVD to have received statin therapy. The difference between urban API and urban White beneficiaries was less than 3 percentage points. Rural API beneficiaries with ASCVD were about as likely as rural White beneficiaries with ASCVD to have received statin therapy.
- Urban Black beneficiaries with ASCVD were less likely than urban White beneficiaries with ASCVD to have received statin therapy. The difference between urban Black and urban White beneficiaries was less than 3 percentage points. Rural Black beneficiaries with ASCVD were less likely than rural White beneficiaries with ASCVD to have received statin therapy. The difference between rural Black and rural White beneficiaries was less than 3 percentage points.
- Urban Hispanic beneficiaries with ASCVD were more likely than urban White beneficiaries with ASCVD to have received statin therapy. The difference between urban Hispanic and urban White beneficiaries was less than 3 percentage points. Rural Hispanic beneficiaries with ASCVD were less likely than rural White beneficiaries with ASCVD to have received statin therapy. The difference between rural Hispanic and rural White beneficiaries was less than 3 percentage points.

\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

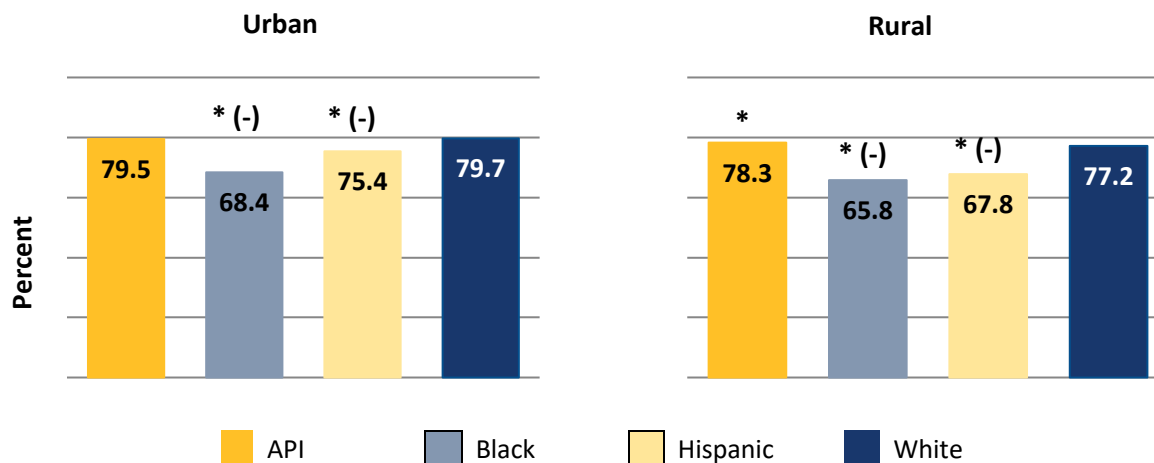
For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

- (+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.
- (-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.



## Medication Adherence for Cardiovascular Disease—Statins

Percentage of male MA enrollees aged 21 to 75 years and female MA enrollees aged 40 to 75 years with clinical atherosclerotic cardiovascular disease (ASCVD) who were dispensed a statin medication during the measurement year who remained on the medication for at least 80 percent of the treatment period, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Urban API beneficiaries with ASCVD were about as likely as urban White beneficiaries with ASCVD to have had proper statin medication adherence. Rural API beneficiaries with ASCVD were more likely than rural White beneficiaries with ASCVD to have had proper statin medication adherence. The difference between rural API and rural White beneficiaries was less than 3 percentage points.
- Urban Black beneficiaries with ASCVD were less likely than urban White beneficiaries with ASCVD to have had proper statin medication adherence. The difference between urban Black and urban White beneficiaries was greater than 3 percentage points. Rural Black beneficiaries with ASCVD were less likely than rural White beneficiaries with ASCVD to have had proper statin medication adherence. The difference between rural Black and rural White beneficiaries was greater than 3 percentage points.
- Urban Hispanic beneficiaries with ASCVD were less likely than urban White beneficiaries with ASCVD to have had proper statin medication adherence. The difference between urban Hispanic and urban White beneficiaries was greater than 3 percentage points. Rural Hispanic beneficiaries with ASCVD were less likely than rural White beneficiaries with ASCVD to have had proper statin medication adherence. The difference between rural Hispanic and rural White beneficiaries was greater than 3 percentage points.

\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

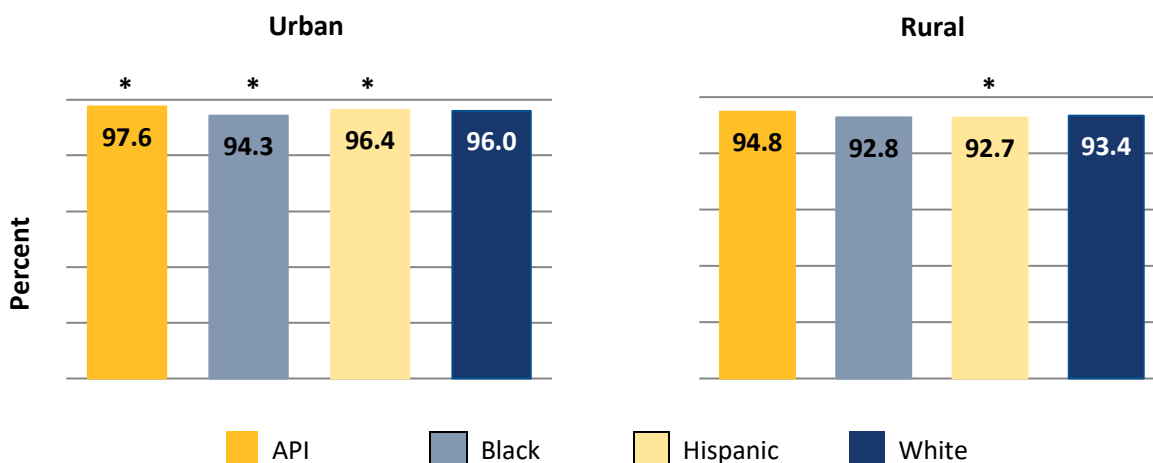
For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

- (+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.
- (-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## Clinical Care: Diabetes

### Diabetes Care—Blood Sugar Testing

**Percentage of Medicare Advantage enrollees aged 18 to 75 years with diabetes (type 1 and type 2) who had one or more HbA1c tests in the past year, by race and ethnicity within urban and rural areas, 2018**



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

#### Disparities

- Urban API beneficiaries with diabetes were more likely than urban White beneficiaries with diabetes to have had their blood sugar tested at least once in the past year. The difference between urban API and urban White beneficiaries was less than 3 percentage points. Rural API beneficiaries with diabetes were about as likely as rural White beneficiaries with diabetes to have had their blood sugar tested at least once in the past year.
- Urban Black beneficiaries with diabetes were less likely than urban White beneficiaries with diabetes to have had their blood sugar tested at least once in the past year. The difference between urban Black and urban White beneficiaries was less than 3 percentage points. Rural Black beneficiaries with diabetes were about as likely as rural White beneficiaries with diabetes to have had their blood sugar tested at least once in the past year.
- Urban Hispanic beneficiaries with diabetes were more likely than urban White beneficiaries with diabetes to have had their blood sugar tested at least once in the past year. The difference between urban Hispanic and urban White beneficiaries was less than 3 percentage points. Rural Hispanic beneficiaries with diabetes were less likely than rural White beneficiaries with diabetes to have had their blood sugar tested at least once in the past year. The difference between rural Hispanic and rural White beneficiaries was less than 3 percentage points.

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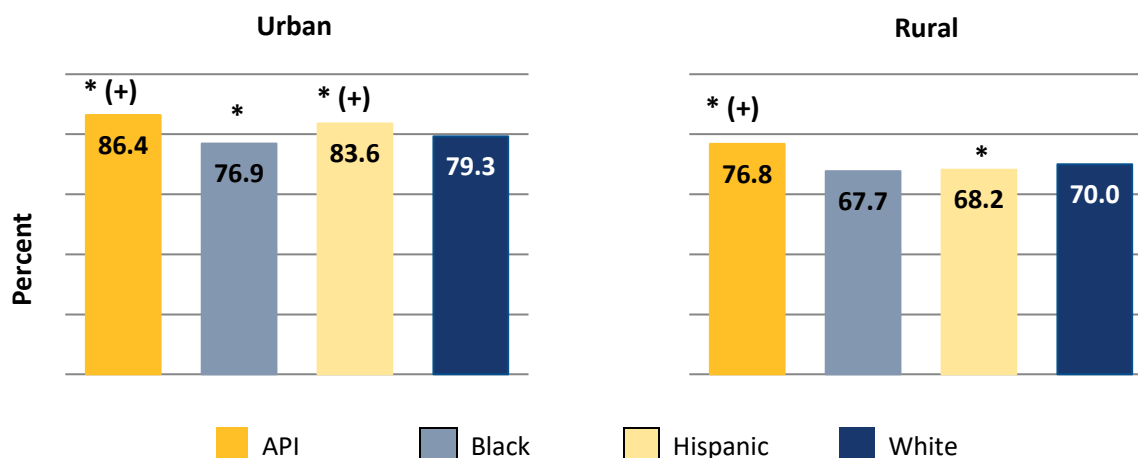
\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

- (+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.
- (-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## Diabetes Care—Eye Exam

Percentage of Medicare Advantage enrollees aged 18 to 75 years with diabetes (type 1 and type 2) who had an eye exam (retinal) in the past year, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Urban API beneficiaries with diabetes were more likely than urban White beneficiaries with diabetes to have had an eye exam in the past year. The difference between urban API and urban White beneficiaries was greater than 3 percentage points. Rural API beneficiaries with diabetes were more likely than rural White beneficiaries with diabetes to have had an eye exam in the past year. The difference between rural API and rural White beneficiaries was greater than 3 percentage points.
- Urban Black beneficiaries with diabetes were less likely than urban White beneficiaries with diabetes to have had an eye exam in the past year. The difference between urban Black and urban White beneficiaries was less than 3 percentage points. Rural Black beneficiaries with diabetes were about as likely as rural White beneficiaries with diabetes to have had an eye exam in the past year.
- Urban Hispanic beneficiaries with diabetes were more likely than urban White beneficiaries with diabetes to have had an eye exam in the past year. The difference between urban Hispanic and urban White beneficiaries was greater than 3 percentage points. Rural Hispanic beneficiaries with diabetes were less likely than rural White beneficiaries with diabetes to have had an eye exam in the past year. The difference between rural Hispanic and rural White beneficiaries was less than 3 percentage points.

\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

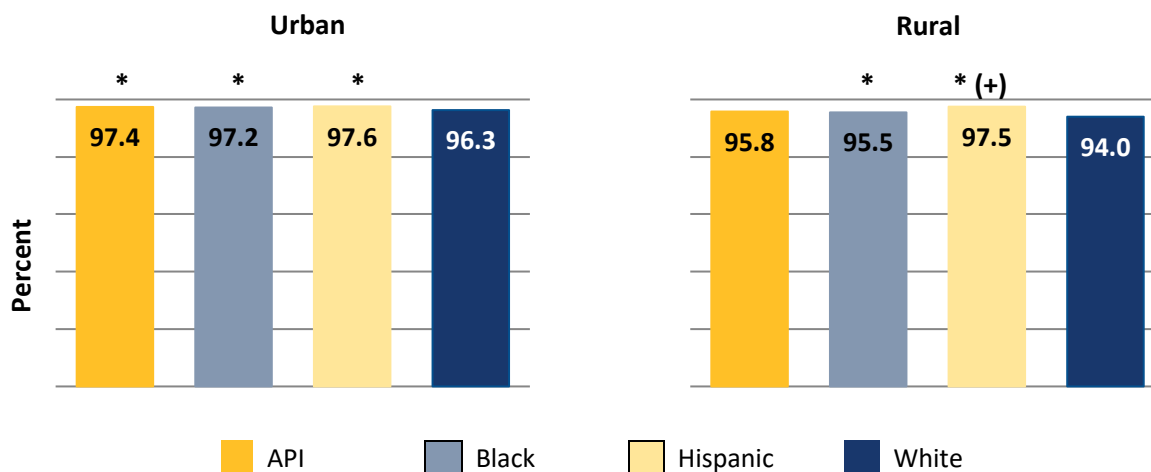
(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.



## Diabetes Care—Kidney Disease Monitoring

Percentage of Medicare Advantage enrollees aged 18 to 75 years with diabetes (type 1 and type 2) who had medical attention for nephropathy in the past year, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Urban API beneficiaries with diabetes were more likely than urban White beneficiaries with diabetes to have had medical attention for nephropathy in the past year. The difference between urban API and urban White beneficiaries was less than 3 percentage points. Rural API beneficiaries with diabetes were about as likely as rural White beneficiaries with diabetes to have had medical attention for nephropathy in the past year.
- Urban Black beneficiaries with diabetes were more likely than urban White beneficiaries with diabetes to have had medical attention for nephropathy in the past year. The difference between urban Black and urban White beneficiaries was less than 3 percentage points. Rural Black beneficiaries with diabetes were more likely than rural White beneficiaries with diabetes to have had medical attention for nephropathy in the past year. The difference between rural Black and rural White beneficiaries was less than 3 percentage points.
- Urban Hispanic beneficiaries with diabetes were more likely than urban White beneficiaries with diabetes to have had medical attention for nephropathy in the past year. The difference between urban Hispanic and urban White beneficiaries was less than 3 percentage points. Rural Hispanic beneficiaries with diabetes were more likely than rural White beneficiaries with diabetes to have had medical attention for nephropathy in the past year. The difference between rural Hispanic and rural White beneficiaries was greater than 3 percentage points.

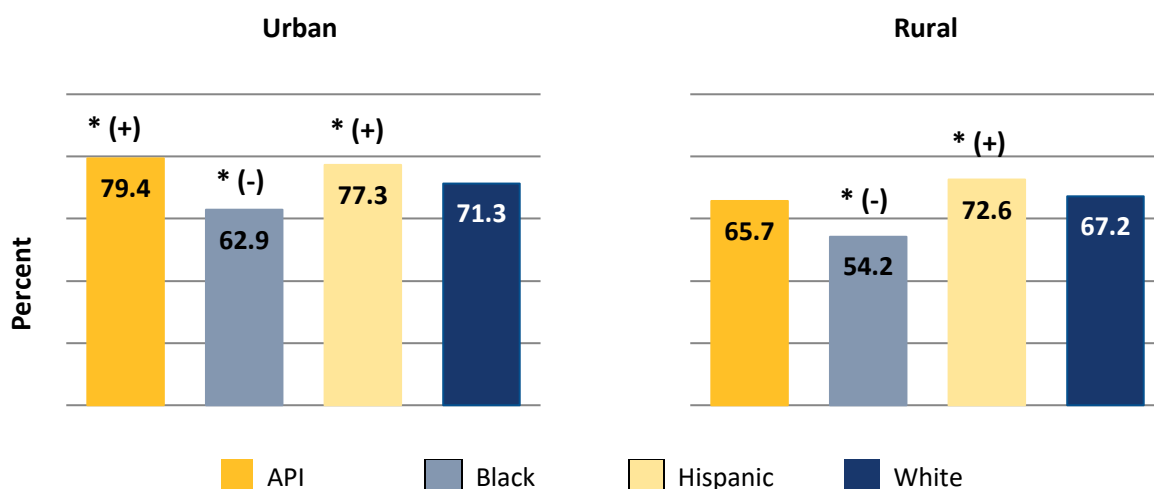
\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

- (+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.
- (-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## Diabetes Care—Blood Pressure Controlled

Percentage of MA enrollees aged 18 to 75 years with diabetes (type 1 and type 2) whose most recent blood pressure was less than 140/90, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Urban API beneficiaries with diabetes were more likely than urban White beneficiaries with diabetes to have their blood pressure under control. The difference between urban API and urban White beneficiaries was greater than 3 percentage points. Rural API beneficiaries with diabetes were about as likely as rural White beneficiaries with diabetes to have their blood pressure under control.
- Urban Black beneficiaries with diabetes were less likely than urban White beneficiaries with diabetes to have their blood pressure under control. The difference between urban Black and urban White beneficiaries was greater than 3 percentage points. Rural Black beneficiaries with diabetes were less likely than rural White beneficiaries with diabetes to have their blood pressure under control. The difference between rural Black and rural White beneficiaries was greater than 3 percentage points.
- Urban Hispanic beneficiaries with diabetes were more likely than urban White beneficiaries with diabetes to have their blood pressure under control. The difference between urban Hispanic and urban White beneficiaries was greater than 3 percentage points. Rural Hispanic beneficiaries with diabetes were more likely than rural White beneficiaries with diabetes to have their blood pressure under control. The difference between rural Hispanic and rural White beneficiaries was greater than 3 percentage points.

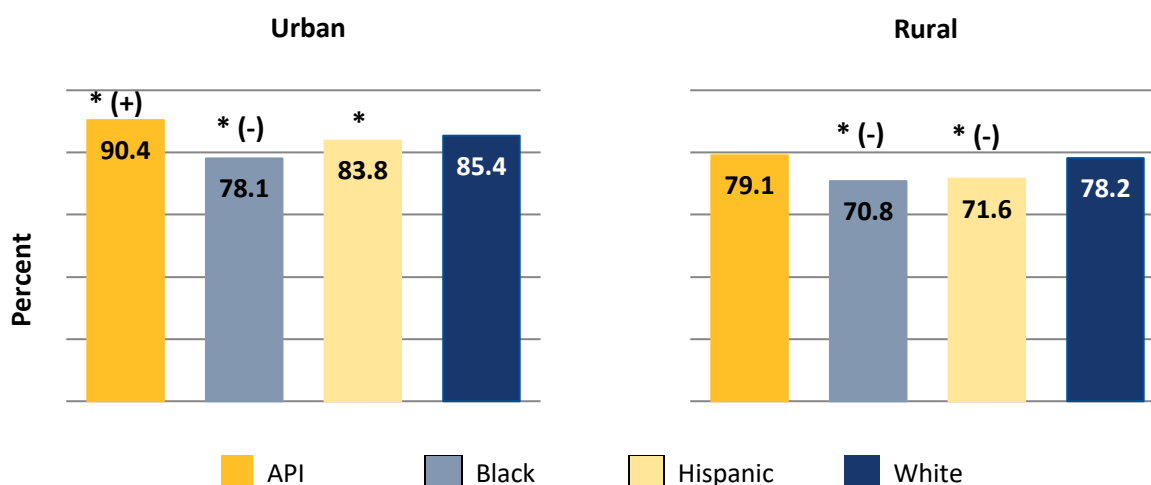
\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

- (+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.
- (-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## Diabetes Care—Blood Sugar Controlled

Percentage of MA enrollees aged 18 to 75 years with diabetes (type 1 and type 2) whose most recent HbA1c level was 9 percent or less, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Urban API beneficiaries with diabetes were more likely than urban White beneficiaries with diabetes to have their blood sugar levels under control. The difference between urban API and urban White beneficiaries was greater than 3 percentage points. Rural API beneficiaries with diabetes were about as likely as rural White beneficiaries with diabetes to have their blood sugar levels under control.
- Urban Black beneficiaries with diabetes were less likely than urban White beneficiaries with diabetes to have their blood sugar levels under control. The difference between urban Black and urban White beneficiaries was greater than 3 percentage points. Rural Black beneficiaries with diabetes were less likely than rural White beneficiaries with diabetes to have their blood sugar levels under control. The difference between rural Black and rural White beneficiaries was greater than 3 percentage points.
- Urban Hispanic beneficiaries with diabetes were less likely than urban White beneficiaries with diabetes to have their blood sugar levels under control. The difference between urban Hispanic and urban White beneficiaries was less than 3 percentage points. Rural Hispanic beneficiaries with diabetes were less likely than rural White beneficiaries with diabetes to have their blood sugar levels under control. The difference between rural Hispanic and rural White beneficiaries was greater than 3 percentage points.

\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

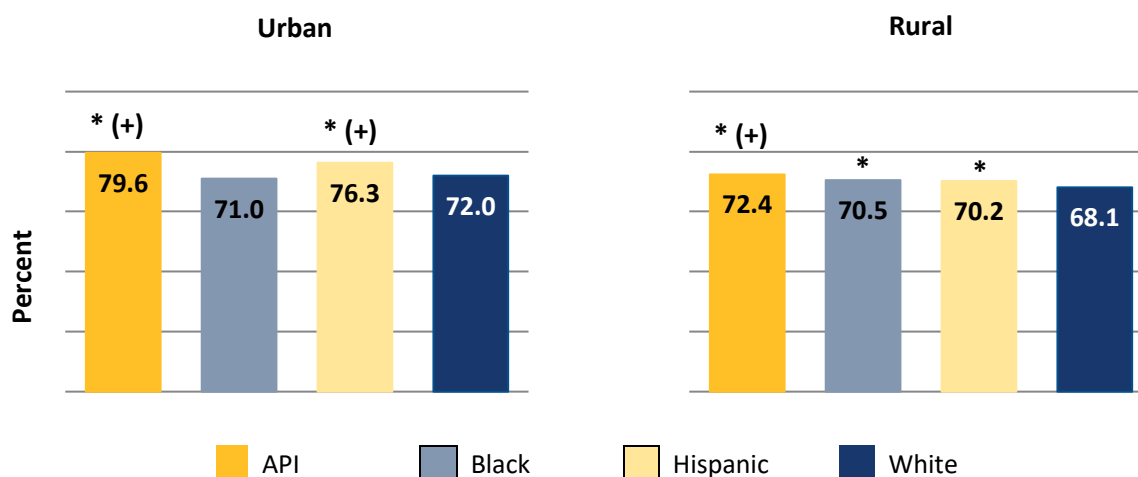
For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## Statin Use in Patients with Diabetes

Percentage of MA enrollees aged 40 to 75 years with diabetes (type 1 and type 2)<sup>†</sup> who received statin therapy, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Urban API beneficiaries with diabetes were more likely than urban White beneficiaries with diabetes to have received statin therapy. The difference between urban API and urban White beneficiaries was greater than 3 percentage points. Rural API beneficiaries with diabetes were more likely than rural White beneficiaries with diabetes to have received statin therapy. The difference between rural API and rural White beneficiaries was greater than 3 percentage points.
- Urban Black beneficiaries with diabetes were about as likely as urban White beneficiaries with diabetes to have received statin therapy. Rural Black beneficiaries with diabetes were more likely than rural White beneficiaries with diabetes to have received statin therapy. The difference between rural Black and rural White beneficiaries was less than 3 percentage points.
- Urban Hispanic beneficiaries with diabetes were more likely than urban White beneficiaries with diabetes to have received statin therapy. The difference between urban Hispanic and urban White beneficiaries was greater than 3 percentage points. Rural Hispanic beneficiaries with diabetes were more likely than rural White beneficiaries with diabetes to have received statin therapy. The difference between rural Hispanic and rural White beneficiaries was less than 3 percentage points.

\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

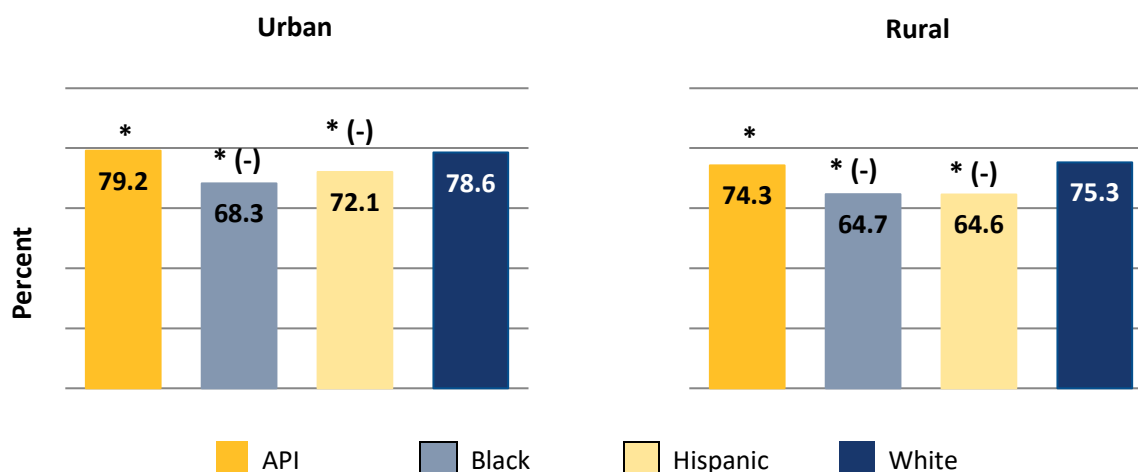
- (+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.
- (-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

<sup>†</sup> Excludes those who also have clinical atherosclerotic cardiovascular disease.



## Medication Adherence for Diabetes—Statins

Percentage of MA enrollees aged 40 to 75 years with diabetes (type 1 and type 2)<sup>†</sup> who were dispensed a statin medication during the measurement year who remained on the medication for at least 80 percent of the treatment period, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Urban API beneficiaries with diabetes were more likely than urban White beneficiaries with diabetes to have had proper statin medication adherence. The difference between urban API and urban White beneficiaries was less than 3 percentage points. Rural API beneficiaries with diabetes were less likely than rural White beneficiaries with diabetes to have had proper statin medication adherence. The difference between rural API and rural White beneficiaries was less than 3 percentage points.
- Urban Black beneficiaries with diabetes were less likely than urban White beneficiaries with diabetes to have had proper statin medication adherence. The difference between urban Black and urban White beneficiaries was greater than 3 percentage points. Rural Black beneficiaries with diabetes were less likely than rural White beneficiaries with diabetes to have had proper statin medication adherence. The difference between rural Black and rural White beneficiaries was greater than 3 percentage points.
- Urban Hispanic beneficiaries with diabetes were less likely than urban White beneficiaries with diabetes to have had proper statin medication adherence. The difference between urban Hispanic and urban White beneficiaries was greater than 3 percentage points. Rural Hispanic beneficiaries with diabetes were less likely than rural White beneficiaries with diabetes to have had proper statin medication adherence. The difference between rural Hispanic and rural White beneficiaries was greater than 3 percentage points.

\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

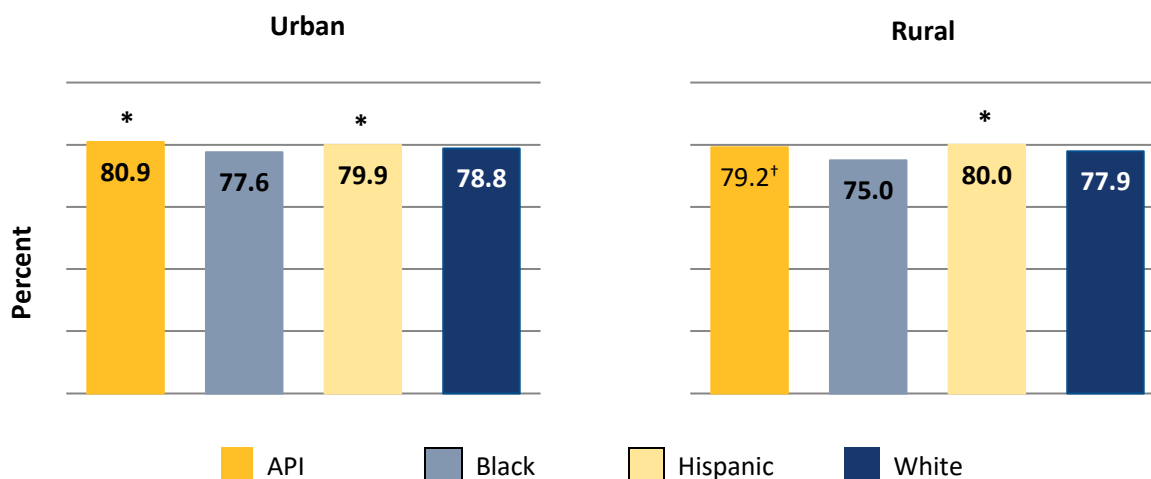
- (+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.
- (-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

<sup>†</sup> Excludes those who also have clinical atherosclerotic cardiovascular disease.

## Clinical Care: Musculoskeletal Conditions

### Rheumatoid Arthritis Management

Percentage of MA enrollees aged 18 years and older who were diagnosed with rheumatoid arthritis during the past year who were dispensed at least one ambulatory prescription for a disease-modifying antirheumatic drug (DMARD), by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> This score is based on fewer than 400 completed measures, and thus its precision may be low.

#### Disparities

- Urban API beneficiaries who were diagnosed with rheumatoid arthritis were more likely than urban White beneficiaries who were diagnosed with rheumatoid arthritis to have been dispensed at least one DMARD. The difference between urban API and urban White beneficiaries was less than 3 percentage points. Rural API beneficiaries who were diagnosed with rheumatoid arthritis were about as likely as rural White beneficiaries who were diagnosed with rheumatoid arthritis to have been dispensed at least one DMARD.
- Urban Black beneficiaries who were diagnosed with rheumatoid arthritis were about as likely as urban White beneficiaries who were diagnosed with rheumatoid arthritis to have been dispensed at least one DMARD. Rural Black beneficiaries who were diagnosed with rheumatoid arthritis were about as likely as rural White beneficiaries who were diagnosed with rheumatoid arthritis to have been dispensed at least one DMARD.
- Urban Hispanic beneficiaries who were diagnosed with rheumatoid arthritis were more likely than urban White beneficiaries who were diagnosed with rheumatoid arthritis to have been dispensed at least one DMARD. The difference between urban Hispanic and urban White beneficiaries was less than 3 percentage points. Rural Hispanic beneficiaries who were diagnosed with rheumatoid arthritis were more likely than rural White beneficiaries who were diagnosed with rheumatoid arthritis to have been dispensed at least one DMARD. The difference between rural Hispanic and rural White beneficiaries was less than 3 percentage points.

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\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

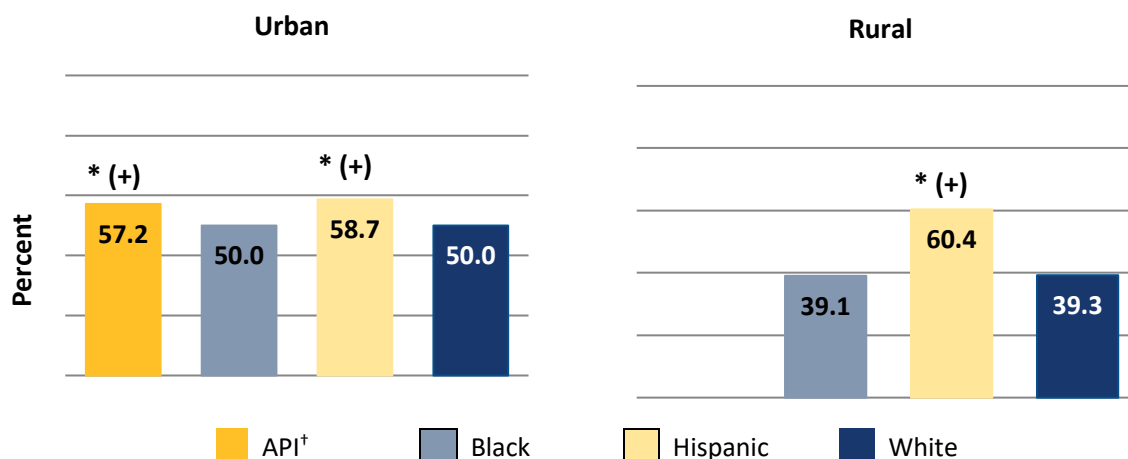
For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## Osteoporosis Management in Women Who Had a Fracture

Percentage of MA enrollees (women) aged 67 to 85 years who suffered a fracture who had either a bone mineral density test or a prescription for a drug to treat osteoporosis in the six months after the fracture, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> There were not enough data from rural API beneficiaries to compare them to Whites on this measure.

### Disparities

- Urban API women who suffered a fracture were more likely than urban White women who suffered a fracture to have had either a bone mineral density test or a prescription for a drug to treat osteoporosis. The difference between urban API and urban White women was greater than 3 percentage points. There were not enough data from rural API women to compare them to rural White women on this measure.
- Urban Black women who suffered a fracture were about as likely as urban White women who suffered a fracture to have had either a bone mineral density test or a prescription for a drug to treat osteoporosis. Rural Black women who suffered a fracture were about as likely as rural White women who suffered a fracture to have had either a bone mineral density test or a prescription for a drug to treat osteoporosis.
- Urban Hispanic women who suffered a fracture were more likely than urban White women who suffered a fracture to have had either a bone mineral density test or a prescription for a drug to treat osteoporosis. The difference between urban Hispanic and urban White women was greater than 3 percentage points. Rural Hispanic women who suffered a fracture were more likely than rural White women who suffered a fracture to have had either a bone mineral density test or a prescription for a drug to treat osteoporosis. The difference between rural Hispanic and rural White women was greater than 3 percentage points.

\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

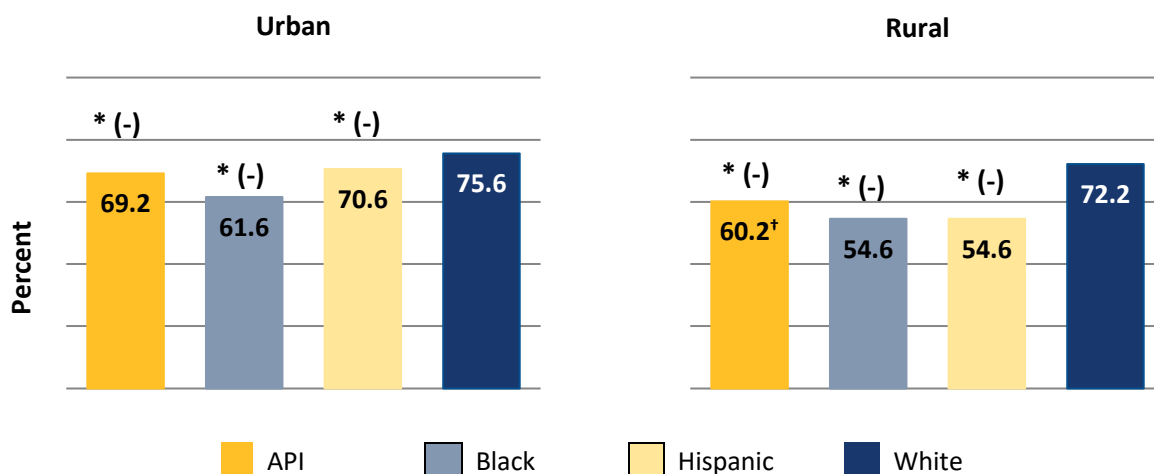
- (+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.
- (-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.



## Clinical Care: Behavioral Health

### Antidepressant Medication Management—Acute Phase Treatment

Percentage of MA enrollees aged 18 years and older who were diagnosed with a new episode of major depression who remained on antidepressant medication for at least 84 days, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> This score is based on fewer than 400 completed measures, and thus its precision may be low.

#### Disparities

- Urban API beneficiaries who were diagnosed with a new episode of major depression were less likely than urban White beneficiaries who were diagnosed with a new episode of major depression to have remained on antidepressant medication for at least 84 days. The difference between urban API and urban White beneficiaries was greater than 3 percentage points. Rural API beneficiaries who were diagnosed with a new episode of major depression were less likely than rural White beneficiaries who were diagnosed with a new episode of major depression to have remained on antidepressant medication for at least 84 days. The difference between rural API and rural White beneficiaries was greater than 3 percentage points.
- Urban Black beneficiaries who were diagnosed with a new episode of major depression were less likely than urban White beneficiaries who were diagnosed with a new episode of major depression to have remained on antidepressant medication for at least 84 days. The difference between urban Black and urban White beneficiaries was greater than 3 percentage points. Rural Black beneficiaries who were diagnosed with a new episode of major depression were less likely than rural White beneficiaries who were diagnosed with a new episode of major depression to have remained on antidepressant medication for at least 84 days. The difference between rural Black and rural White beneficiaries was greater than 3 percentage points.

- Urban Hispanic beneficiaries who were diagnosed with a new episode of major depression were less likely than urban White beneficiaries who were diagnosed with a new episode of major depression to have remained on antidepressant medication for at least 84 days. The difference between urban Hispanic and urban White beneficiaries was greater than 3 percentage points. Rural Hispanic beneficiaries who were diagnosed with a new episode of major depression were less likely than rural White beneficiaries who were diagnosed with a new episode of major depression to have remained on antidepressant medication for at least 84 days. The difference between rural Hispanic and rural White beneficiaries was greater than 3 percentage points.

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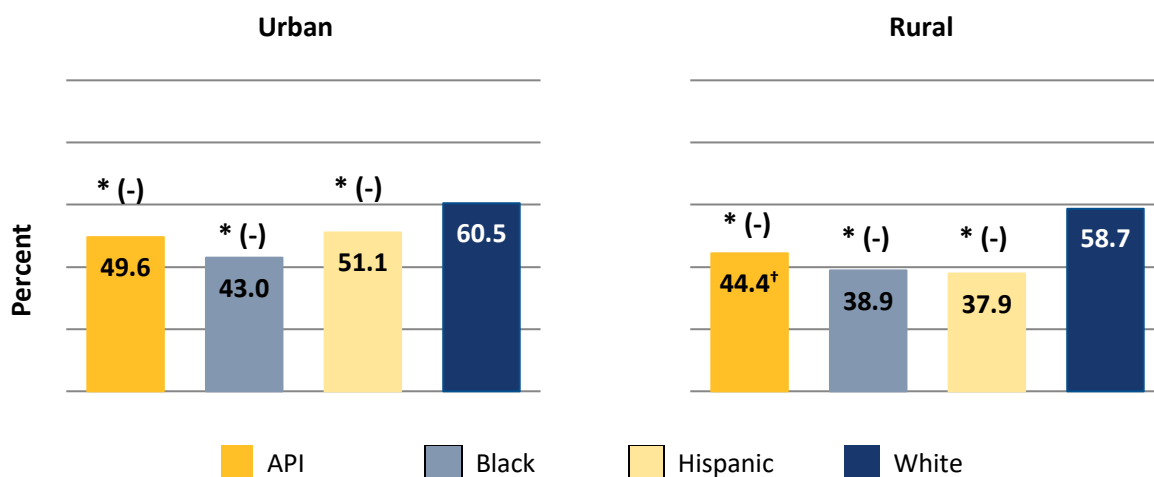
\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

- (+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.
- (-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## Antidepressant Medication Management—Continuation Phase Treatment

Percentage of MA enrollees aged 18 years and older with a new diagnosis of major depression who were newly treated with antidepressant medication who remained on antidepressant medication for at least 180 days, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> This score is based on fewer than 400 completed measures, and thus its precision may be low.

### Disparities

- Urban API beneficiaries who were diagnosed with a new episode of major depression were less likely than urban White beneficiaries who were diagnosed with a new episode of major depression to have been treated with and to have remained on antidepressant medication for at least 180 days. The difference between urban API and urban White beneficiaries was greater than 3 percentage points. Rural API beneficiaries who were diagnosed with a new episode of major depression were less likely than rural White beneficiaries who were diagnosed with a new episode of major depression to have been treated with and to have remained on antidepressant medication for at least 180 days. The difference between rural API and rural White beneficiaries was greater than 3 percentage points.
- Urban Black beneficiaries who were diagnosed with a new episode of major depression were less likely than urban White beneficiaries who were diagnosed with a new episode of major depression to have been treated with and to have remained on antidepressant medication for at least 180 days. The difference between urban Black and urban White beneficiaries was greater than 3 percentage points. Rural Black beneficiaries who were diagnosed with a new episode of major depression were less likely than rural White beneficiaries who were diagnosed with a new episode of major depression to have been treated with and to have remained on antidepressant medication for at least 180 days. The difference between rural Black and rural White beneficiaries was greater than 3 percentage points.
- Urban Hispanic beneficiaries who were diagnosed with a new episode of major depression were less likely than urban White beneficiaries who were diagnosed with a new episode of

major depression to have been treated with and to have remained on antidepressant medication for at least 180 days. The difference between urban Hispanic and urban White beneficiaries was greater than 3 percentage points. Rural Hispanic beneficiaries who were diagnosed with a new episode of major depression were less likely than rural White beneficiaries who were diagnosed with a new episode of major depression to have been treated with and to have remained on antidepressant medication for at least 180 days. The difference between rural Hispanic and rural White beneficiaries was greater than 3 percentage points.

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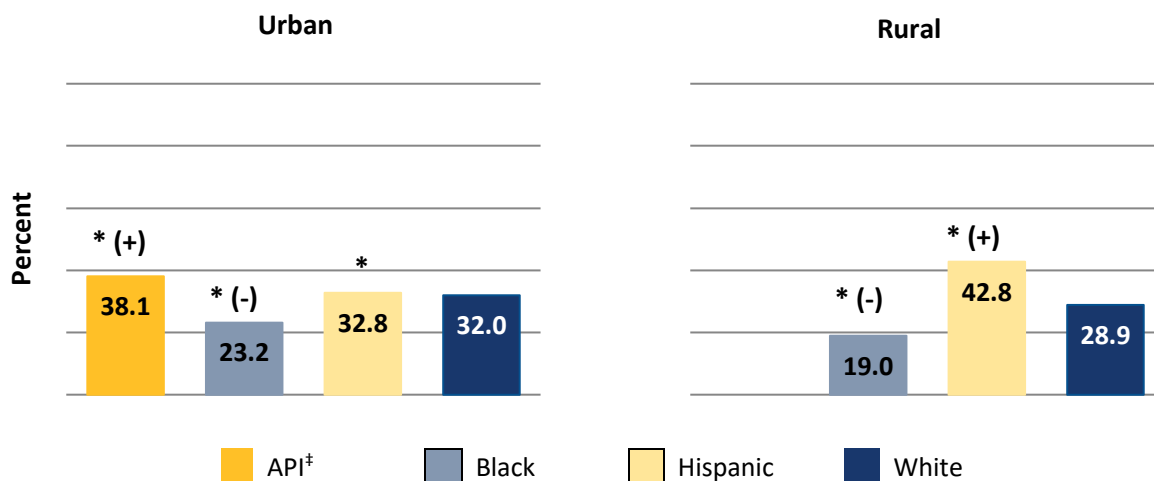
\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

- (+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.
- (-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## Follow-up After Hospital Stay for Mental Illness (within seven days of discharge)

Percentage of MA enrollees aged 18 years and older<sup>†</sup> who were hospitalized for treatment of selected mental health disorders who had an outpatient visit, an intensive outpatient encounter, or partial hospitalization with a mental health practitioner within seven days of discharge, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>‡</sup> There were not enough data from rural API beneficiaries to compare them to Whites on this measure.

### Disparities

- Urban API beneficiaries who were hospitalized for a mental health disorder were more likely than urban White beneficiaries who were hospitalized for a mental health disorder to have had a follow-up visit with a mental health practitioner within seven days of being discharged. The difference between urban API and urban White beneficiaries was greater than 3 percentage points. There were not enough data from rural API beneficiaries to compare them to rural White beneficiaries on this measure.
- Urban Black beneficiaries who were hospitalized for a mental health disorder were less likely than urban White beneficiaries who were hospitalized for a mental health disorder to have had a follow-up visit with a mental health practitioner within seven days of being discharged. The difference between urban Black and urban White beneficiaries was greater than 3 percentage points. Rural Black beneficiaries who were hospitalized for a mental health disorder were less likely than rural White beneficiaries who were hospitalized for a mental health disorder to have had a follow-up visit with a mental health practitioner within seven days of being discharged. The difference between rural Black and rural White beneficiaries was greater than 3 percentage points.
- Urban Hispanic beneficiaries who were hospitalized for a mental health disorder were more likely than urban White beneficiaries who were hospitalized for a mental health disorder to have had a follow-up visit with a mental health practitioner within seven days of being discharged. The difference between urban Hispanic and urban White beneficiaries

was less than 3 percentage points. Rural Hispanic beneficiaries who were hospitalized for a mental health disorder were more likely than rural White beneficiaries who were hospitalized for a mental health disorder to have had a follow-up visit with a mental health practitioner within seven days of being discharged. The difference between rural Hispanic and rural White beneficiaries was greater than 3 percentage points.

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\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

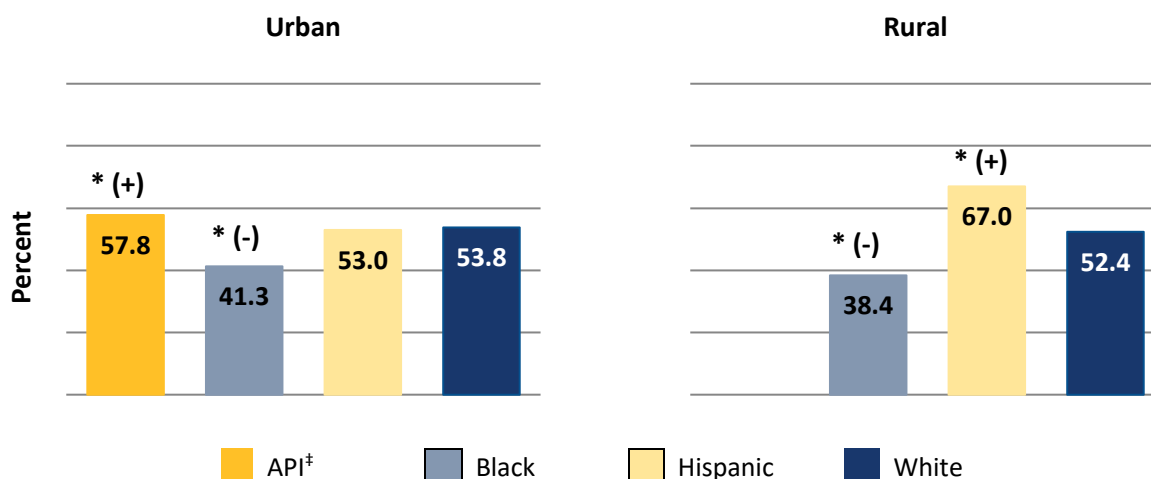
(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

<sup>†</sup> Although the lower-bound age cutoff for this HEDIS measure is six years old, the data used in this report are limited to adults.



## Follow-up After Hospital Stay for Mental Illness (within 30 days of discharge)

Percentage of MA enrollees aged 18 years and older<sup>†</sup> who were hospitalized for treatment of selected mental health disorders who had an outpatient visit, an intensive outpatient encounter, or partial hospitalization with a mental health practitioner within 30 days of discharge, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> There were not enough data from rural API beneficiaries to compare them to Whites on this measure.

### Disparities

- Urban API beneficiaries who were hospitalized for a mental health disorder were more likely than urban White beneficiaries who were hospitalized for a mental health disorder to have had a follow-up visit with a mental health practitioner within 30 days of being discharged. The difference between urban API and urban White beneficiaries was greater than 3 percentage points. There were not enough data from rural API beneficiaries to compare them to rural White beneficiaries on this measure.
- Urban Black beneficiaries who were hospitalized for a mental health disorder were less likely than urban White beneficiaries who were hospitalized for a mental health disorder to have had a follow-up visit with a mental health practitioner within 30 days of being discharged. The difference between urban Black and urban White beneficiaries was greater than 3 percentage points. Rural Black beneficiaries who were hospitalized for a mental health disorder were less likely than rural White beneficiaries who were hospitalized for a mental health disorder to have had a follow-up visit with a mental health practitioner within 30 days of being discharged. The difference between rural Black and rural White beneficiaries was greater than 3 percentage points.
- Urban Hispanic beneficiaries who were hospitalized for a mental health disorder were about as likely as urban White beneficiaries who were hospitalized for a mental health disorder to have had a follow-up visit with a mental health practitioner within 30 days of being discharged. Rural Hispanic beneficiaries who were hospitalized for a mental health

disorder were more likely than rural White beneficiaries who were hospitalized for a mental health disorder to have had a follow-up visit with a mental health practitioner within 30 days of being discharged. The difference between rural Hispanic and rural White beneficiaries was greater than 3 percentage points.

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\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

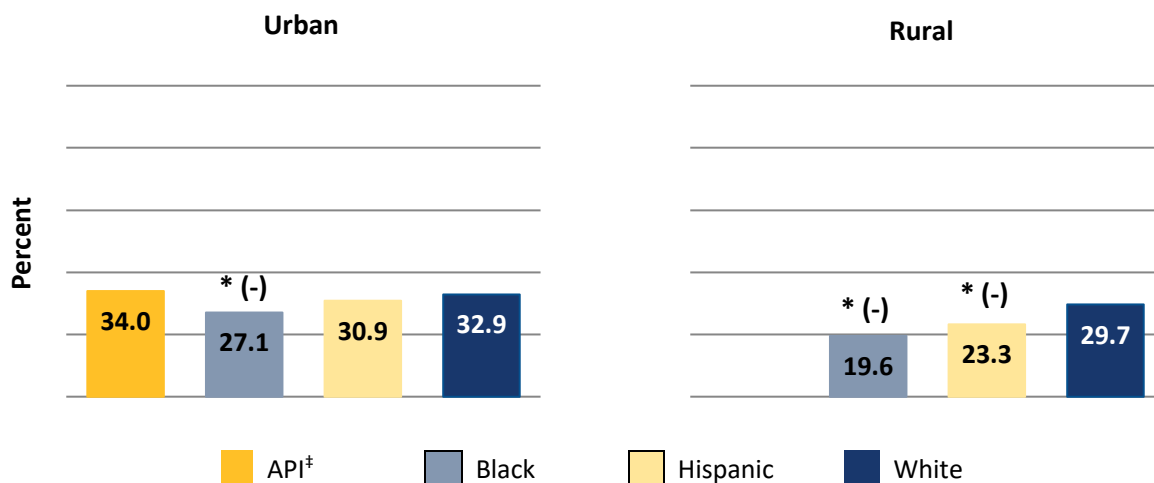
For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

- (+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.
- (-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

<sup>†</sup> Although the lower-bound age cutoff for this HEDIS measure is six years old, the data used in this report are limited to adults.

## Follow-up After Emergency Department (ED) Visit for Mental Illness (within seven days of discharge)

Percentage of MA enrollees aged 18 years and older<sup>†</sup> who had an ED visit for selected mental health disorders who had an outpatient visit, an intensive outpatient encounter, or partial hospitalization with a mental health practitioner within seven days of the ED visit, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>‡</sup> There were not enough data from rural API beneficiaries to compare them to Whites on this measure.

### Disparities

- Urban API beneficiaries who had an ED visit for a mental health disorder were about as likely as urban White beneficiaries who had an ED visit for a mental health disorder to have had a follow-up visit with a mental health practitioner within seven days of the ED visit. There were not enough data from rural API beneficiaries to compare them to rural White beneficiaries on this measure.
- Urban Black beneficiaries who had an ED visit for a mental health disorder were less likely than urban White beneficiaries who had an ED visit for a mental health disorder to have had a follow-up visit with a mental health practitioner within seven days of the ED visit. The difference between urban Black and urban White beneficiaries was greater than 3 percentage points. Rural Black beneficiaries who had an ED visit for a mental health disorder were less likely than rural White beneficiaries who had an ED visit for a mental health disorder to have had a follow-up visit with a mental health practitioner within seven days of the ED visit. The difference between rural Black and rural White beneficiaries was greater than 3 percentage points.
- Urban Hispanic beneficiaries who had an ED visit for a mental health disorder were about as likely as urban White beneficiaries who had an ED visit for a mental health disorder to have had a follow-up visit with a mental health practitioner within seven days of the ED visit. Rural Hispanic beneficiaries who had an ED visit for a mental health disorder were less likely than rural White beneficiaries who had an ED visit for a mental health disorder to

have had a follow-up visit with a mental health practitioner within seven days of the ED visit. The difference between rural Hispanic and rural White beneficiaries was greater than 3 percentage points.

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\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

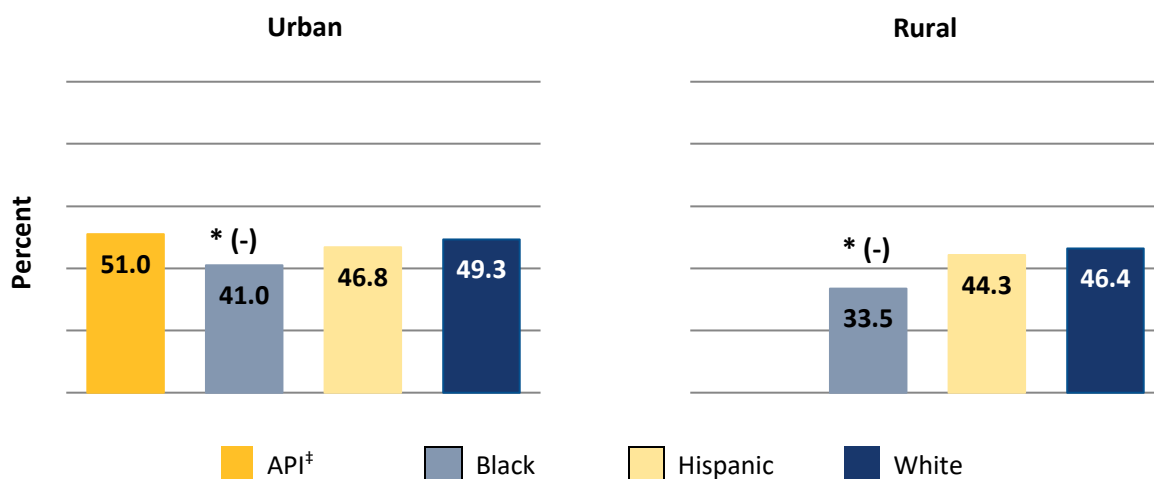
(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

† Although the lower-bound age cutoff for this HEDIS measure is six years old, the data used in this report are limited to adults.

## Follow-up After Emergency Department (ED) Visit for Mental Illness (within 30 days of discharge)

Percentage of MA enrollees aged 18 years and older<sup>†</sup> who had an ED visit for selected mental health disorders who had an outpatient visit, an intensive outpatient encounter, or partial hospitalization with a mental health practitioner within 30 days of the ED visit, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>‡</sup> There were not enough data from rural API beneficiaries to compare them to Whites on this measure.

### Disparities

- Urban API beneficiaries who had an ED visit for a mental health disorder were about as likely as urban White beneficiaries who had an ED visit for a mental health disorder to have had a follow-up visit with a mental health practitioner within 30 days of the ED visit. There were not enough data from rural API beneficiaries to compare them to rural White beneficiaries on this measure.
- Urban Black beneficiaries who had an ED visit for a mental health disorder were less likely than urban White beneficiaries who had an ED visit for a mental health disorder to have had a follow-up visit with a mental health practitioner within 30 days of the ED visit. The difference between urban Black and urban White beneficiaries was greater than 3 percentage points. Rural Black beneficiaries who had an ED visit for a mental health disorder were less likely than rural White beneficiaries who had an ED visit for a mental health disorder to have had a follow-up visit with a mental health practitioner within 30 days of the ED visit. The difference between rural Black and rural White beneficiaries was greater than 3 percentage points.
- Urban Hispanic beneficiaries who had an ED visit for a mental health disorder were about as likely as urban White beneficiaries who had an ED visit for a mental health disorder to have had a follow-up visit with a mental health practitioner within 30 days of the ED visit. Rural Hispanic beneficiaries who had an ED visit for a mental health disorder were about as

likely as rural White beneficiaries who had an ED visit for a mental health disorder to have had a follow-up visit with a mental health practitioner within 30 days of the ED visit.

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\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

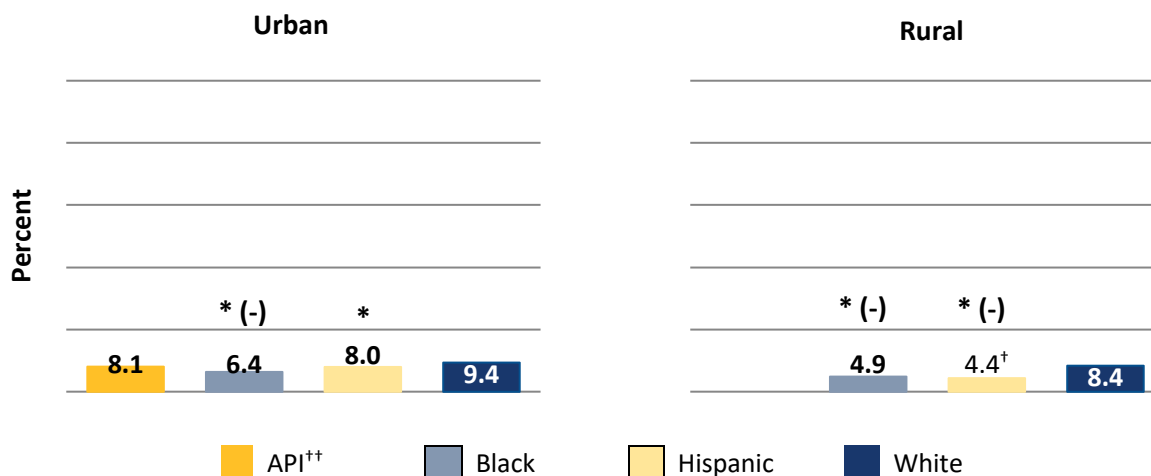
- (+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.
- (-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

<sup>†</sup> Although the lower-bound age cutoff for this HEDIS measure is six years old, the data used in this report are limited to adults.



## Follow-up After Emergency Department (ED) Visit for Alcohol and Other Drug (AOD) Abuse or Dependence (within seven days of discharge)

Percentage of MA enrollees aged 18 years and older<sup>†</sup> who had an ED visit for AOD abuse or dependence who had a follow-up visit for AOD abuse or dependence within seven days of the ED visit, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>‡</sup> This score is based on fewer than 400 completed measures, and thus its precision may be low.

<sup>††</sup> There were not enough data from rural API beneficiaries to compare them to Whites on this measure.

### Disparities

- Urban API beneficiaries who had an ED visit for AOD abuse or dependence were about as likely as urban White beneficiaries who had an ED visit for AOD abuse or dependence to have had a follow-up visit for AOD abuse or dependence within seven days of the ED visit. There were not enough data from rural API beneficiaries to compare them to rural White beneficiaries on this measure.
- Urban Black beneficiaries who had an ED visit for AOD abuse or dependence were less likely than urban White beneficiaries who had an ED visit for AOD abuse or dependence to have had a follow-up visit for AOD abuse or dependence within seven days of the ED visit. The difference between urban Black and urban White beneficiaries was greater than 3 percentage points. Rural Black beneficiaries who had an ED visit for AOD abuse or dependence were less likely than rural White beneficiaries who had an ED visit for AOD abuse or dependence to have had a follow-up visit for AOD abuse or dependence within seven days of the ED visit. The difference between rural Black and rural White beneficiaries was greater than 3 percentage points.
- Urban Hispanic beneficiaries who had an ED visit for AOD abuse or dependence were less likely than urban White beneficiaries who had an ED visit for AOD abuse or dependence to have had a follow-up visit for AOD abuse or dependence within seven days of the ED visit. The difference between urban Hispanic and urban White beneficiaries was less than 3 percentage points. Rural Hispanic beneficiaries who had an ED visit for AOD abuse or

dependence were less likely than rural White beneficiaries who had an ED visit for AOD abuse or dependence to have had a follow-up visit for AOD abuse or dependence within seven days of the ED visit. The difference between rural Hispanic and rural White beneficiaries was greater than 3 percentage points.

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\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

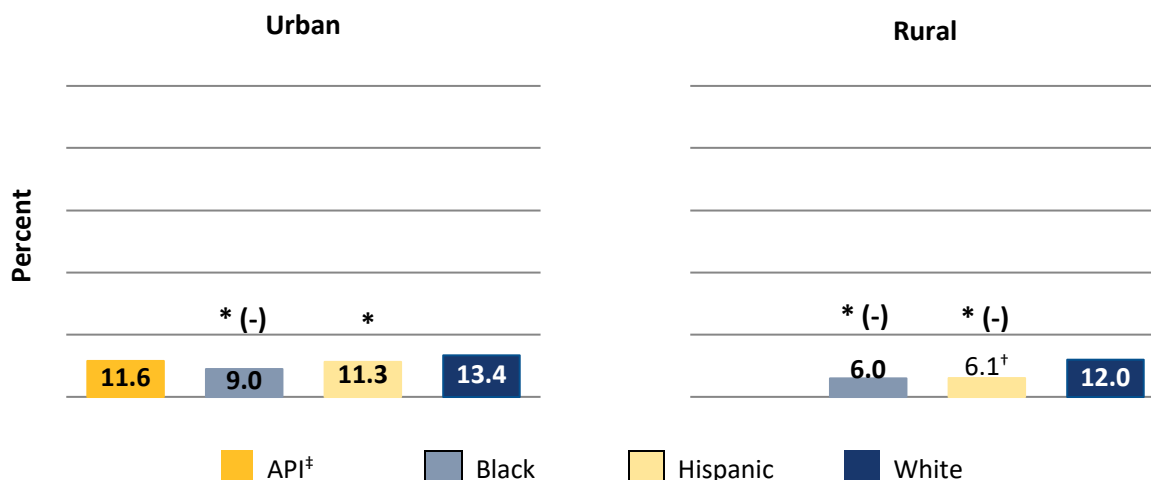
For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

- (+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.
- (-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

<sup>†</sup> Although the lower-bound age cutoff for this HEDIS measure is 13 years old, the data used in this report are limited to adults.

## Follow-up After Emergency Department (ED) Visit for Alcohol and Other Drug (AOD) Abuse or Dependence (within 30 days of discharge)

Percentage of MA enrollees aged 18 years and older<sup>†</sup> who had an ED visit for AOD abuse or dependence who had a follow-up visit for AOD abuse or dependence within 30 days of the ED visit, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>‡</sup> This score is based on fewer than 400 completed measures, and thus its precision may be low.

<sup>††</sup> There were not enough data from rural API beneficiaries to compare them to Whites on this measure.

### Disparities

- Urban API beneficiaries who had an ED visit for AOD abuse or dependence were about as likely as urban White beneficiaries who had an ED visit for AOD abuse or dependence to have had a follow-up visit for AOD abuse or dependence within 30 days of the ED visit. There were not enough data from rural API beneficiaries to compare them to rural White beneficiaries on this measure.
- Urban Black beneficiaries who had an ED visit for AOD abuse or dependence were less likely than urban White beneficiaries who had an ED visit for AOD abuse or dependence to have had a follow-up visit for AOD abuse or dependence within 30 days of the ED visit. The difference between urban Black and urban White beneficiaries was greater than 3 percentage points. Rural Black beneficiaries who had an ED visit for AOD abuse or dependence were less likely than rural White beneficiaries who had an ED visit for AOD abuse or dependence to have had a follow-up visit for AOD abuse or dependence within 30 days of the ED visit. The difference between rural Black and rural White beneficiaries was greater than 3 percentage points.
- Urban Hispanic beneficiaries who had an ED visit for AOD abuse or dependence were less likely than urban White beneficiaries who had an ED visit for AOD abuse or dependence to have had a follow-up visit for AOD abuse or dependence within 30 days of the ED visit. The difference between urban Hispanic and urban White beneficiaries was less than 3 percentage points. Rural Hispanic beneficiaries who had an ED visit for AOD abuse or

dependence were less likely than rural White beneficiaries who had an ED visit for AOD abuse or dependence to have had a follow-up visit for AOD abuse or dependence within 30 days of the ED visit. The difference between rural Hispanic and rural White beneficiaries was greater than 3 percentage points.

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\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

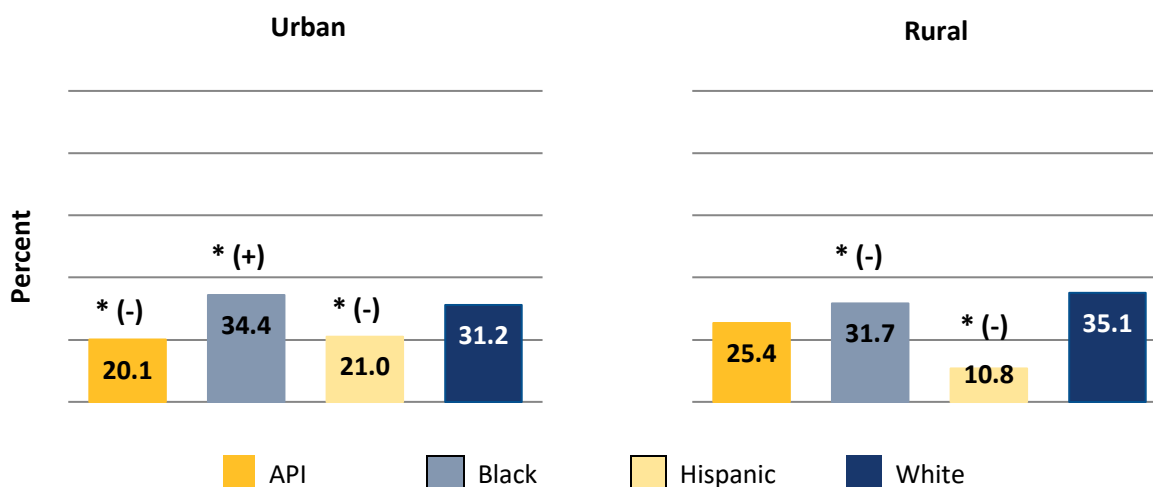
For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

- (+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.
- (-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

<sup>†</sup> Although the lower-bound age cutoff for this HEDIS measure is 13 years old, the data used in this report are limited to adults.

## Initiation of Alcohol and Other Drug Dependence Treatment

Percentage of MA enrollees aged 18 years and older<sup>†</sup> with a new episode of alcohol or other drug (AOD) dependence who initiate<sup>‡</sup> treatment within 14 days of the diagnosis, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Urban API beneficiaries with a new episode of AOD dependence were less likely than urban White beneficiaries with a new episode of AOD dependence to have initiated treatment within 14 days of the diagnosis. The difference between urban API and urban White beneficiaries was greater than 3 percentage points. Rural API beneficiaries with a new episode of AOD dependence were about as likely as rural White beneficiaries with a new episode of AOD dependence to have initiated treatment within 14 days of the diagnosis.
- Urban Black beneficiaries with a new episode of AOD dependence were more likely than urban White beneficiaries with a new episode of AOD dependence to have initiated treatment within 14 days of the diagnosis. The difference between urban Black and urban White beneficiaries was greater than 3 percentage points. Rural Black beneficiaries with a new episode of AOD dependence were less likely than rural White beneficiaries with a new episode of AOD dependence to have initiated treatment within 14 days of the diagnosis. The difference between rural Black and rural White beneficiaries was greater than 3 percentage points.
- Urban Hispanic beneficiaries with a new episode of AOD dependence were less likely than urban White beneficiaries with a new episode of AOD dependence to have initiated treatment within 14 days of the diagnosis. The difference between urban Hispanic and urban White beneficiaries was greater than 3 percentage points. Rural Hispanic beneficiaries with a new episode of AOD dependence were less likely than rural White beneficiaries with a new episode of AOD dependence to have initiated treatment within 14

days of the diagnosis. The difference between rural Hispanic and rural White beneficiaries was greater than 3 percentage points.

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\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

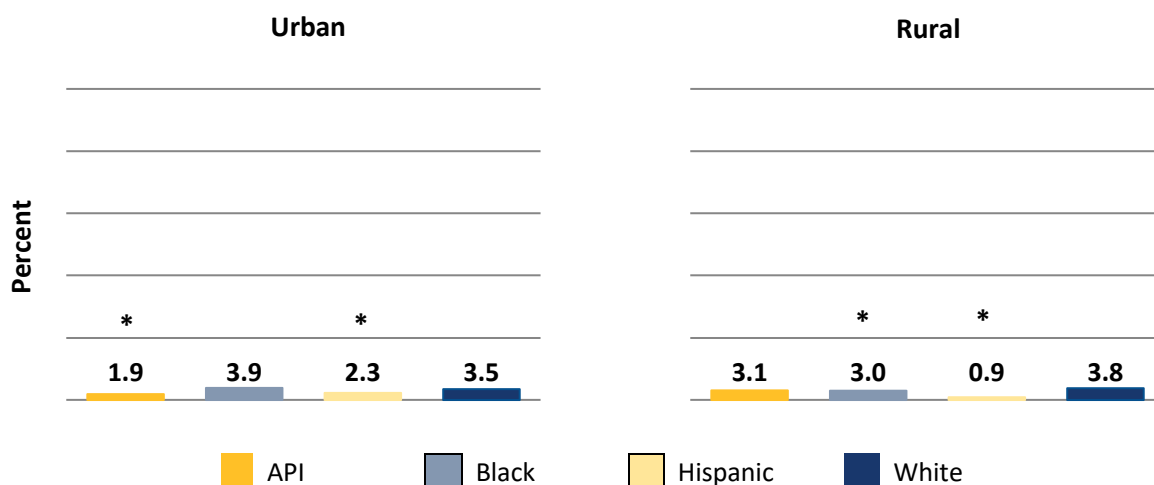
<sup>†</sup> Although the lower-bound age cutoff for this HEDIS measure is 13 years old, the data used in this report are limited to adults.

<sup>‡</sup> Initiation may occur through an inpatient AOD admission, outpatient visit, intensive outpatient encounter, or partial hospitalization.



## Engagement of Alcohol and Other Drug Dependence Treatment

Percentage of MA enrollees aged 18 years and older<sup>†</sup> with a new episode of alcohol or other drug (AOD) dependence who initiated treatment and who had two or more additional services within 30 days of the initiation visit, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Urban API beneficiaries with a new episode of AOD dependence who initiated treatment were less likely than urban White beneficiaries with a new episode of AOD dependence who initiated treatment to have had two or more additional services within 30 days of their initial visit for treatment. The difference between urban API and urban White beneficiaries was less than 3 percentage points. Rural API beneficiaries with a new episode of AOD dependence who initiated treatment were about as likely as rural White beneficiaries with a new episode of AOD dependence who initiated treatment to have had two or more additional services within 30 days of their initial visit for treatment.
- Urban Black beneficiaries with a new episode of AOD dependence who initiated treatment were about as likely as urban White beneficiaries with a new episode of AOD dependence who initiated treatment to have had two or more additional services within 30 days of their initial visit for treatment. Rural Black beneficiaries with a new episode of AOD dependence who initiated treatment were less likely than rural White beneficiaries with a new episode of AOD dependence who initiated treatment to have had two or more additional services within 30 days of their initial visit for treatment. The difference between rural Black and rural White beneficiaries was less than 3 percentage points.
- Urban Hispanic beneficiaries with a new episode of AOD dependence who initiated treatment were less likely than urban White beneficiaries with a new episode of AOD dependence who initiated treatment to have had two or more additional services within 30 days of their initial visit for treatment. The difference between urban Hispanic and urban White beneficiaries was less than 3 percentage points. Rural Hispanic beneficiaries with a

new episode of AOD dependence who initiated treatment were less likely than rural White beneficiaries with a new episode of AOD dependence who initiated treatment to have had two or more additional services within 30 days of their initial visit for treatment. The difference between rural Hispanic and rural White beneficiaries was less than 3 percentage points.

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\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

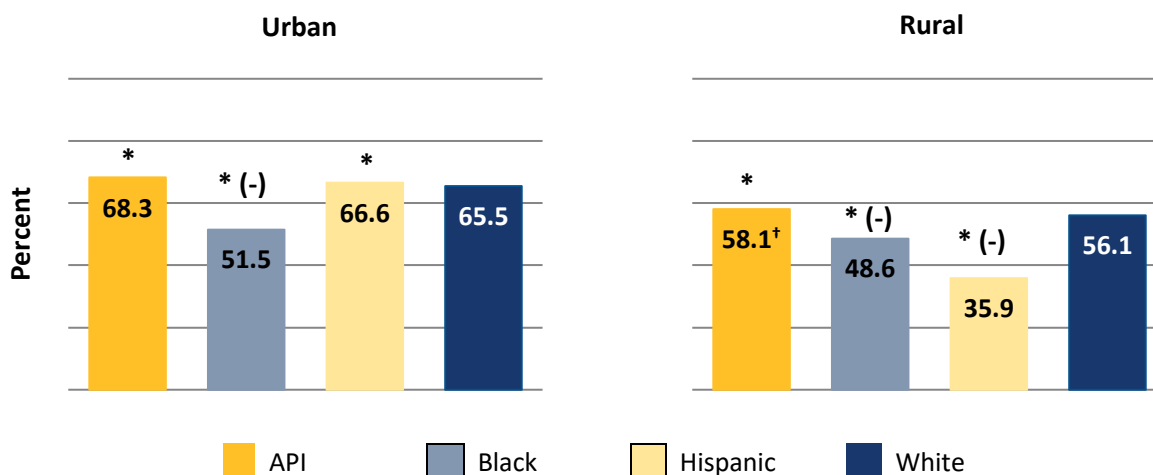
(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

<sup>†</sup> Although the lower-bound age cutoff for this HEDIS measure is 13 years old, the data used in this report are limited to adults.

## Clinical Care: Medication Management and Care Coordination

### Medication Reconciliation After Hospital Discharge

Percentage of MA enrollees aged 18 years and older who were discharged from an inpatient facility and had their medications reconciled within 30 days, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> This score is based on fewer than 400 completed measures, and thus its precision may be low.

### Disparities

- Urban API beneficiaries who were discharged from an inpatient facility were more likely than urban White beneficiaries who were discharged from an inpatient facility to have had their medications reconciled within 30 days. The difference between urban API and urban White beneficiaries was less than 3 percentage points. Rural API beneficiaries who were discharged from an inpatient facility were more likely than rural White beneficiaries who were discharged from an inpatient facility to have had their medications reconciled within 30 days. The difference between rural API and rural White beneficiaries was less than 3 percentage points.
- Urban Black beneficiaries who were discharged from an inpatient facility were less likely than urban White beneficiaries who were discharged from an inpatient facility to have had their medications reconciled within 30 days. The difference between urban Black and urban White beneficiaries was greater than 3 percentage points. Rural Black beneficiaries who were discharged from an inpatient facility were less likely than rural White beneficiaries who were discharged from an inpatient facility to have had their medications reconciled within 30 days. The difference between rural Black and rural White beneficiaries was greater than 3 percentage points.
- Urban Hispanic beneficiaries who were discharged from an inpatient facility were more likely than urban White beneficiaries who were discharged from an inpatient facility to

have had their medications reconciled within 30 days. The difference between urban Hispanic and urban White beneficiaries was less than 3 percentage points. Rural Hispanic beneficiaries who were discharged from an inpatient facility were less likely than rural White beneficiaries who were discharged from an inpatient facility to have had their medications reconciled within 30 days. The difference between rural Hispanic and rural White beneficiaries was greater than 3 percentage points.

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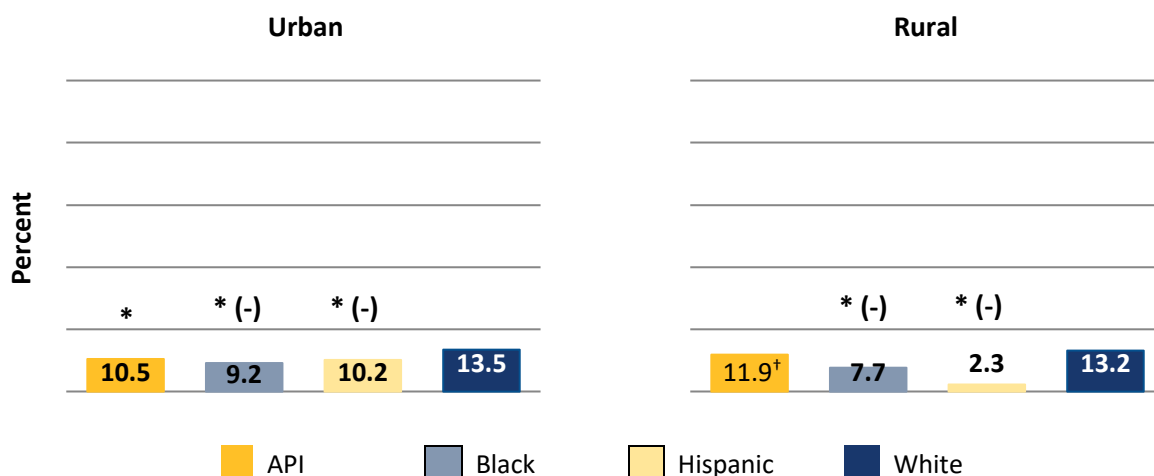
\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

- (+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.
- (-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## Transitions of Care—Notification of Inpatient Admission

Percentage of MA enrollees aged 18 years and older who were discharged from an inpatient facility whose primary or ongoing care providers were notified of the inpatient admission on the day of or the day following admission, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> This score is based on fewer than 400 completed measures, and thus its precision may be low.

### Disparities

- The primary or ongoing care providers of urban API beneficiaries who were discharged from an inpatient facility were less likely than the primary or ongoing care providers of urban White beneficiaries who were discharged from an inpatient facility to have been notified of the inpatient admission on the day of or the day following admission. The difference between these groups was less than 3 percentage points. The primary or ongoing care providers of rural API beneficiaries who were discharged from an inpatient facility were about as likely as the primary or ongoing care providers of rural White beneficiaries who were discharged from an inpatient facility to have been notified of the inpatient admission on the day of or the day following admission.
- The primary or ongoing care providers of urban Black beneficiaries who were discharged from an inpatient facility were less likely than the primary or ongoing care providers of urban White beneficiaries who were discharged from an inpatient facility to have been notified of the inpatient admission on the day of or the day following admission. The difference between these groups was greater than 3 percentage points. The primary or ongoing care providers of rural Black beneficiaries who were discharged from an inpatient facility were less likely than the primary or ongoing care providers of rural White beneficiaries who were discharged from an inpatient facility to have been notified of the inpatient admission on the day of or the day following admission. The difference between these groups was greater than 3 percentage points.
- The primary or ongoing care providers of urban Hispanic beneficiaries who were discharged from an inpatient facility were less likely than the primary or ongoing care

providers of urban White beneficiaries who were discharged from an inpatient facility to have been notified of the inpatient admission on the day of or the day following admission. The difference between these groups was greater than 3 percentage points. The primary or ongoing care providers of rural Hispanic beneficiaries who were discharged from an inpatient facility were less likely than the primary or ongoing care providers of rural White beneficiaries who were discharged from an inpatient facility to have been notified of the inpatient admission on the day of or the day following admission. The difference between these groups was greater than 3 percentage points.

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\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

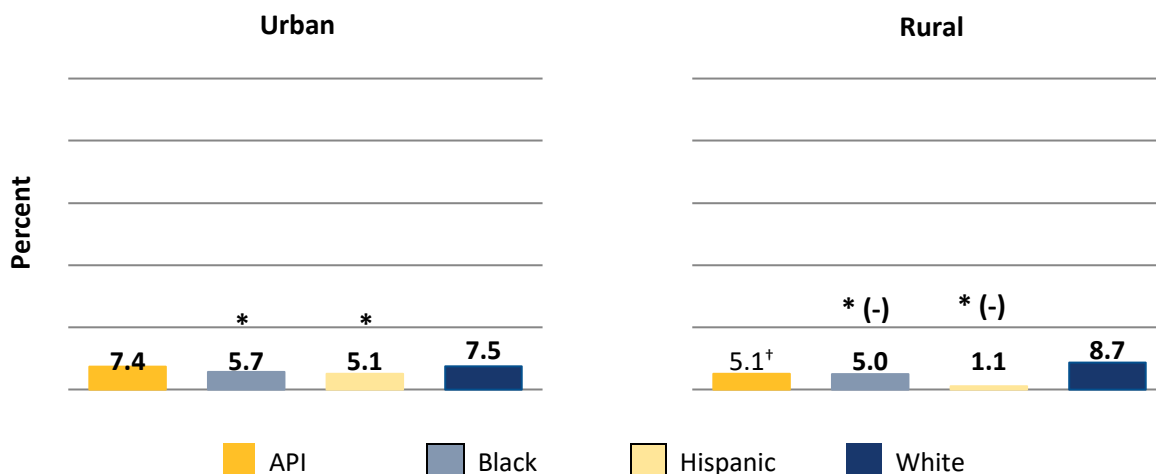
For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

- (+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.
- (-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.



## Transitions of Care—Receipt of Discharge Information

Percentage of MA enrollees aged 18 years and older who were discharged from an inpatient facility who received discharge information on the day of or the day following discharge, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> This score is based on fewer than 400 completed measures, and thus its precision may be low.

### Disparities

- Urban API beneficiaries who were discharged from an inpatient facility were about as likely as urban White beneficiaries who were discharged from an inpatient facility to have received discharge information on the day of or the day following discharge. Rural API beneficiaries who were discharged from an inpatient facility were about as likely as rural White beneficiaries who were discharged from an inpatient facility to have received discharge information on the day of or the day following discharge.
- Urban Black beneficiaries who were discharged from an inpatient facility were less likely than urban White beneficiaries who were discharged from an inpatient facility to have received discharge information on the day of or the day following discharge. The difference between urban Black and urban White beneficiaries was less than 3 percentage points. Rural Black beneficiaries who were discharged from an inpatient facility were less likely than rural White beneficiaries who were discharged from an inpatient facility to have received discharge information on the day of or the day following discharge. The difference between rural Black and rural White beneficiaries was greater than 3 percentage points.
- Urban Hispanic beneficiaries who were discharged from an inpatient facility were less likely than urban White beneficiaries who were discharged from an inpatient facility to have received discharge information on the day of or the day following discharge. The difference between urban Hispanic and urban White beneficiaries was less than 3 percentage points. Rural Hispanic beneficiaries who were discharged from an inpatient facility were less likely than rural White beneficiaries who were discharged from an inpatient facility to have

received discharge information on the day of or the day following discharge. The difference between rural Hispanic and rural White beneficiaries was greater than 3 percentage points.

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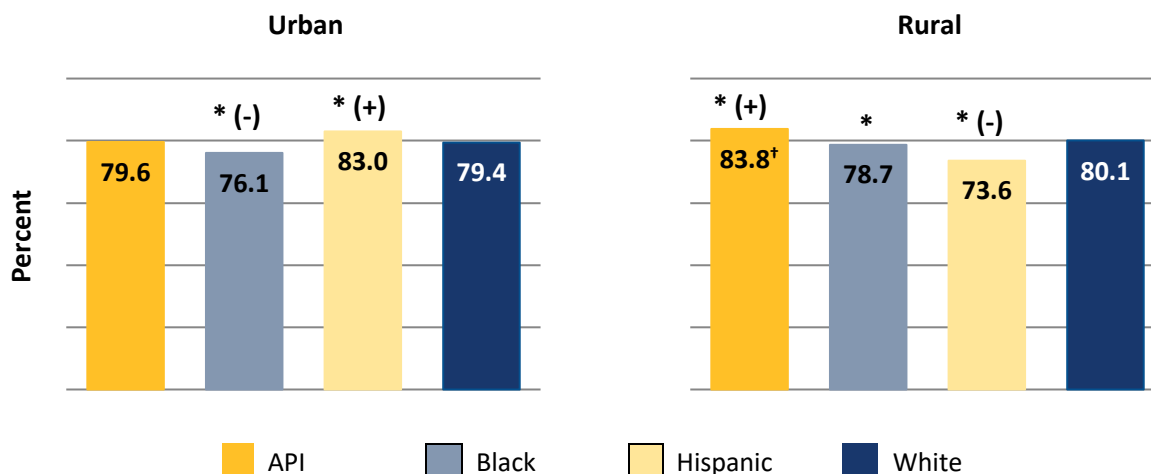
\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

- (+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.
- (-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## Transitions of Care—Patient Engagement After Inpatient Discharge

Percentage of MA enrollees aged 18 years and older who were discharged from an inpatient facility for whom patient engagement (office visit, home visit, telehealth) was provided within 30 days of discharge, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> This score is based on fewer than 400 completed measures, and thus its precision may be low.

### Disparities

- Urban API beneficiaries who were discharged from an inpatient facility were about as likely as urban White beneficiaries who were discharged from an inpatient facility to have had an office visit, home visit, or to have received telehealth services within 30 days of discharge. Rural API beneficiaries who were discharged from an inpatient facility were more likely than rural White beneficiaries who were discharged from an inpatient facility to have had an office visit, home visit, or to have received telehealth services within 30 days of discharge. The difference between rural API and rural White beneficiaries was greater than 3 percentage points.
- Urban Black beneficiaries who were discharged from an inpatient facility were less likely than urban White beneficiaries who were discharged from an inpatient facility to have had an office visit, home visit, or to have received telehealth services within 30 days of discharge. The difference between urban Black and urban White beneficiaries was greater than 3 percentage points. Rural Black beneficiaries who were discharged from an inpatient facility were less likely than rural White beneficiaries who were discharged from an inpatient facility to have had an office visit, home visit, or to have received telehealth services within 30 days of discharge. The difference between rural Black and rural White beneficiaries was less than 3 percentage points.
- Urban Hispanic beneficiaries who were discharged from an inpatient facility were more likely than urban White beneficiaries who were discharged from an inpatient facility to have had an office visit, home visit, or to have received telehealth services within 30 days of discharge. The difference between urban Hispanic and urban White beneficiaries was

greater than 3 percentage points. Rural Hispanic beneficiaries who were discharged from an inpatient facility were less likely than rural White beneficiaries who were discharged from an inpatient facility to have had an office visit, home visit, or to have received telehealth services within 30 days of discharge. The difference between rural Hispanic and rural White beneficiaries was greater than 3 percentage points.

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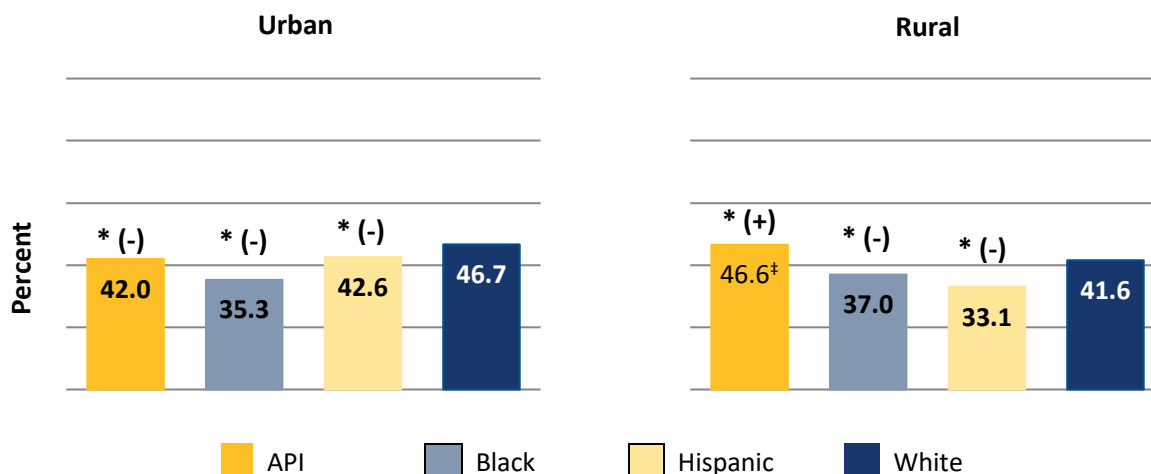
\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

- (+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.
- (-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## Transitions of Care—Medication Reconciliation After Inpatient Discharge

Percentage of MA enrollees aged 18 years and older who were discharged from an inpatient facility for whom medications were reconciled within 30 days of discharge,<sup>†</sup> by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

<sup>†</sup> This score is based on fewer than 400 completed measures, and thus its precision may be low.

### Disparities

- Urban API beneficiaries who were discharged from an inpatient facility were less likely than urban White beneficiaries who were discharged from an inpatient facility to have had their medications reconciled within 30 days of discharge. The difference between urban API and urban White beneficiaries was greater than 3 percentage points. Rural API beneficiaries who were discharged from an inpatient facility were more likely than rural White beneficiaries who were discharged from an inpatient facility to have had their medications reconciled within 30 days of discharge. The difference between rural API and rural White beneficiaries was greater than 3 percentage points.
- Urban Black beneficiaries who were discharged from an inpatient facility were less likely than urban White beneficiaries who were discharged from an inpatient facility to have had their medications reconciled within 30 days of discharge. The difference between urban Black and urban White beneficiaries was greater than 3 percentage points. Rural Black beneficiaries who were discharged from an inpatient facility were less likely than rural White beneficiaries who were discharged from an inpatient facility to have had their medications reconciled within 30 days of discharge. The difference between rural Black and rural White beneficiaries was greater than 3 percentage points.
- Urban Hispanic beneficiaries who were discharged from an inpatient facility were less likely than urban White beneficiaries who were discharged from an inpatient facility to have had their medications reconciled within 30 days of discharge. The difference between urban Hispanic and urban White beneficiaries was greater than 3 percentage points. Rural Hispanic beneficiaries who were discharged from an inpatient facility were less likely than

rural White beneficiaries who were discharged from an inpatient facility to have had their medications reconciled within 30 days of discharge. The difference between rural Hispanic and rural White beneficiaries was greater than 3 percentage points.

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\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

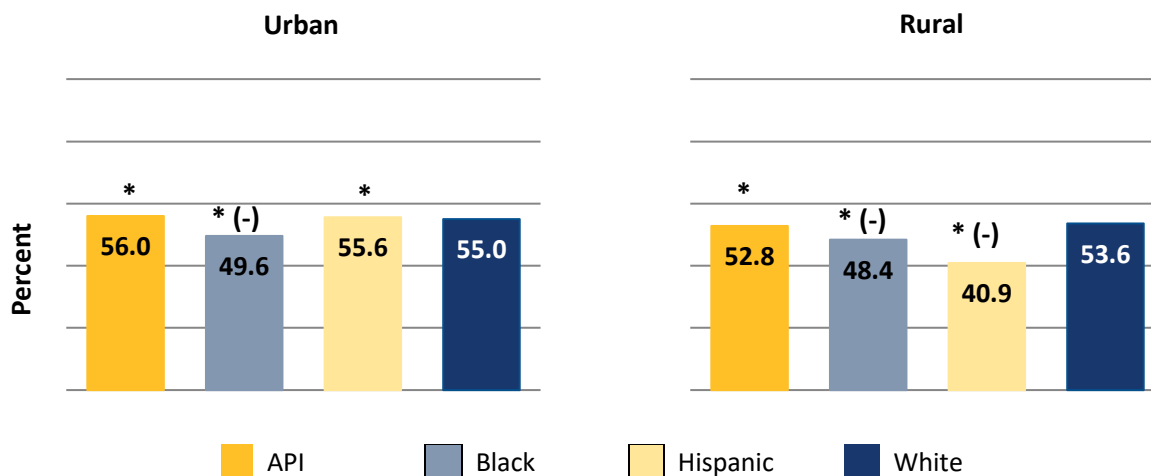
(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

<sup>†</sup> Scores on this measure may differ from scores on the medication reconciliation measure presented on page 201 because of different rules governing the collection of the data.



## Follow-Up After Emergency Department (ED) Visit for People with High-Risk Multiple Chronic Conditions

Percentage of MA enrollees aged 18 years and older with multiple high-risk chronic conditions<sup>†</sup> who received follow-up care within seven days of an ED visit, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Urban API beneficiaries with multiple high-risk chronic conditions<sup>†</sup> were more likely than urban White beneficiaries with multiple high-risk chronic conditions to have received follow-up care within seven days of an ED visit. The difference between urban API and urban White beneficiaries was less than 3 percentage points. Rural API beneficiaries with multiple high-risk chronic conditions were less likely than rural White beneficiaries who were discharged from an inpatient facility to have received follow-up care within seven days of an ED visit. The difference between rural API and rural White beneficiaries was less than 3 percentage points.
- Urban Black beneficiaries with multiple high-risk chronic conditions were less likely than urban White beneficiaries with multiple high-risk chronic conditions to have received follow-up care within seven days of an ED visit. The difference between urban Black and urban White beneficiaries was greater than 3 percentage points. Rural Black beneficiaries with multiple high-risk chronic conditions were less likely than rural White beneficiaries with multiple high-risk chronic conditions to have received follow-up care within seven days of an ED visit. The difference between rural Black and rural White beneficiaries was greater than 3 percentage points.
- Urban Hispanic beneficiaries with multiple high-risk chronic conditions were more likely than urban White beneficiaries with multiple high-risk chronic conditions to have received follow-up care within seven days of an ED visit. The difference between urban Hispanic and urban White beneficiaries was less than 3 percentage points. Rural Hispanic beneficiaries with multiple high-risk chronic conditions were less likely than rural White beneficiaries

with multiple high-risk chronic conditions to have received follow-up care within seven days of an ED visit. The difference between rural Hispanic and rural White beneficiaries was greater than 3 percentage points.

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\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

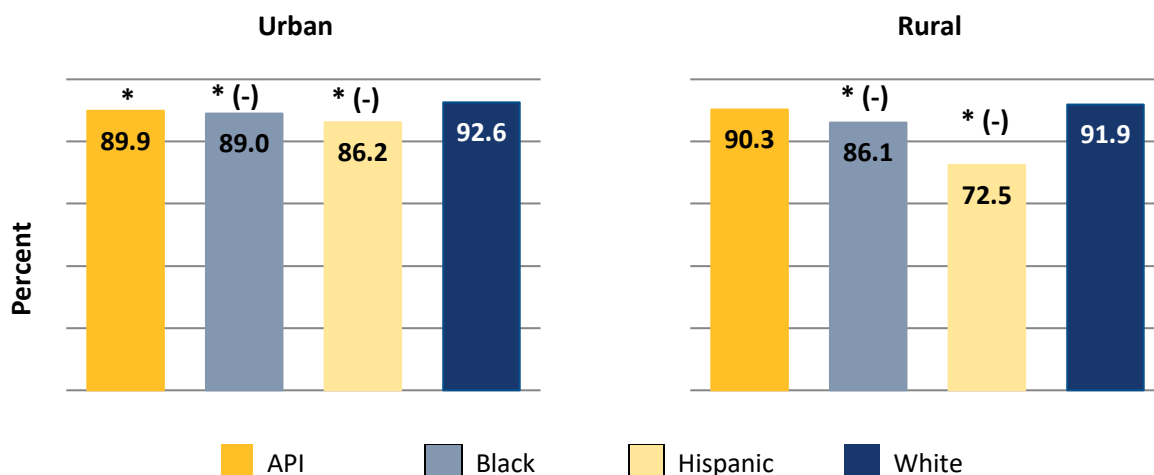
(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

† Conditions include COPD and asthma, Alzheimer's disease and related disorders, chronic kidney disease, depression, heart failure, acute myocardial infarction, atrial fibrillation, and stroke and transient ischemic attack.

## Clinical Care: Overuse/Appropriateness

### Avoiding Potentially Harmful Drug-Disease Interactions in Elderly Patients with Chronic Renal Failure

Percentage of MA enrollees aged 65 years and older with chronic renal failure who were not dispensed a prescription for a potentially harmful medication,<sup>†</sup> by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

#### Disparities

- Use of potentially harmful medication<sup>†</sup> was avoided less often for elderly urban API beneficiaries with chronic renal failure than for elderly urban White beneficiaries with chronic renal failure. The difference between elderly urban API and elderly urban White beneficiaries was less than 3 percentage points. Use of potentially harmful medication was avoided about as often for elderly rural API beneficiaries with chronic renal failure as for elderly rural White beneficiaries with chronic renal failure.
- Use of potentially harmful medication was avoided less often for elderly urban Black beneficiaries with chronic renal failure than for elderly urban White beneficiaries with chronic renal failure. The difference between elderly urban Black and elderly urban White beneficiaries was greater than 3 percentage points. Use of potentially harmful medication was avoided less often for elderly rural Black beneficiaries with chronic renal failure than for elderly rural White beneficiaries with chronic renal failure. The difference between elderly rural Black and elderly rural White beneficiaries was greater than 3 percentage points.
- Use of potentially harmful medication was avoided less often for elderly urban Hispanic beneficiaries with chronic renal failure than for elderly urban White beneficiaries with chronic renal failure. The difference between elderly urban Hispanic and elderly urban White beneficiaries was greater than 3 percentage points. Use of potentially harmful

medication was avoided less often for elderly rural Hispanic beneficiaries with chronic renal failure than for elderly rural White beneficiaries with chronic renal failure. The difference between elderly rural Hispanic and elderly rural White beneficiaries was greater than 3 percentage points.

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\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

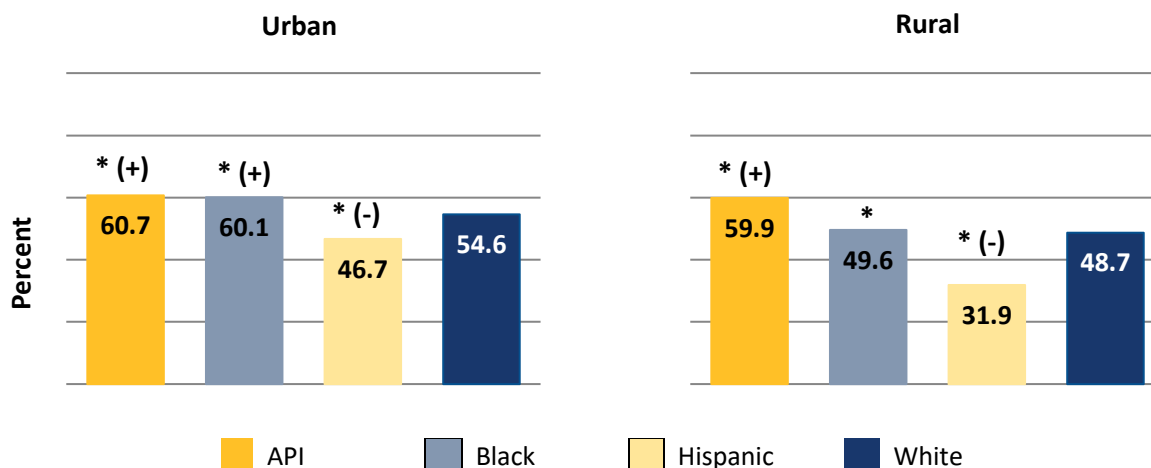
For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

- (+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.
- (-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

<sup>†</sup> This includes cyclooxygenase-2 (COX-2) selective nonsteroidal anti-inflammatory drugs (NSAIDs) or nonaspirin NSAIDs.

## Avoiding Potentially Harmful Drug-Disease Interactions in Elderly Patients with Dementia

Percentage of MA enrollees aged 65 years and older with dementia who were not dispensed a prescription for a potentially harmful medication,<sup>†</sup> by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Use of potentially harmful medication<sup>†</sup> was avoided more often for elderly urban API beneficiaries with dementia than for elderly urban White beneficiaries with dementia. The difference between elderly urban API and elderly urban White beneficiaries was greater than 3 percentage points. Use of potentially harmful medication was avoided more often for elderly rural API beneficiaries with dementia than for elderly rural White beneficiaries with dementia. The difference between elderly rural API and elderly rural White beneficiaries was greater than 3 percentage points.
- Use of potentially harmful medication was avoided more often for elderly urban Black beneficiaries with dementia than for elderly urban White beneficiaries with dementia. The difference between elderly urban Black and elderly urban White beneficiaries was greater than 3 percentage points. Use of potentially harmful medication was avoided more often for elderly rural Black beneficiaries with dementia than for elderly rural White beneficiaries with dementia. The difference between elderly rural Black and elderly rural White beneficiaries was less than 3 percentage points.
- Use of potentially harmful medication was avoided less often for elderly urban Hispanic beneficiaries with dementia than for elderly urban White beneficiaries with dementia. The difference between elderly urban Hispanic and elderly urban White beneficiaries was greater than 3 percentage points. Use of potentially harmful medication was avoided less often for elderly rural Hispanic beneficiaries with dementia than for elderly rural White beneficiaries with dementia. The difference between elderly rural Hispanic and elderly rural White beneficiaries was greater than 3 percentage points.

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\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

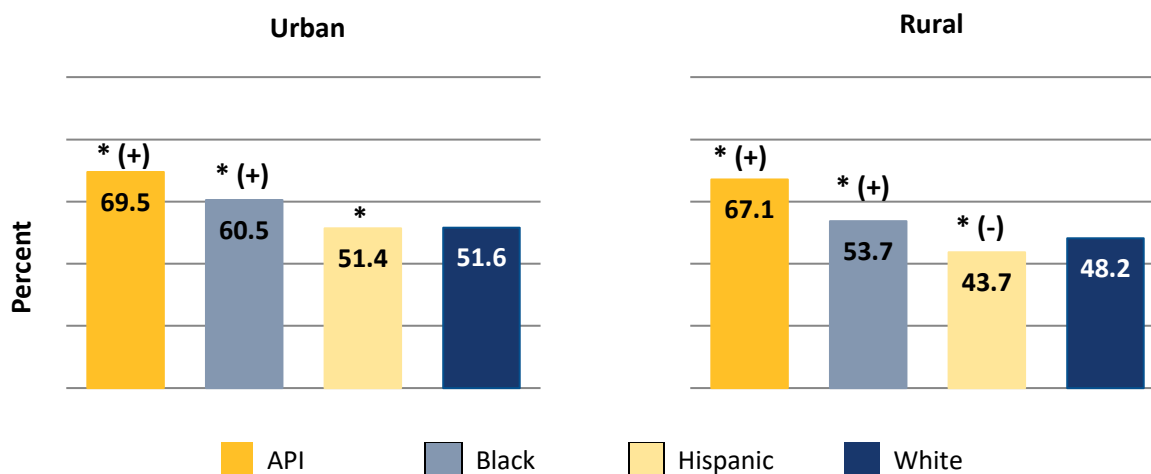
(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

<sup>†</sup> This includes antiemetics, antipsychotics, benzodiazepines, tricyclic antidepressants, H<sub>2</sub> receptor antagonists, nonbenzodiazepine hypnotics, and anticholinergic agents.



## Avoiding Potentially Harmful Drug-Disease Interactions in Elderly Patients with a History of Falls

Percentage of MA enrollees aged 65 years and older with dementia who were not dispensed a prescription for a potentially harmful medication,<sup>†</sup> by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Use of potentially harmful medication<sup>†</sup> was avoided more often for elderly urban API beneficiaries with a history of falls than for elderly urban White beneficiaries with a history of falls. The difference between elderly urban API and elderly urban White beneficiaries was greater than 3 percentage points. Use of potentially harmful medication was avoided more often for elderly rural API beneficiaries with a history of falls than for elderly rural White beneficiaries with a history of falls. The difference between elderly rural API and elderly rural White beneficiaries was greater than 3 percentage points.
- Use of potentially harmful medication was avoided more often for elderly urban Black beneficiaries with a history of falls than for elderly urban White beneficiaries with a history of falls. The difference between elderly urban Black and elderly urban White beneficiaries was greater than 3 percentage points. Use of potentially harmful medication was avoided more often for elderly rural Black beneficiaries with a history of falls than for elderly rural White beneficiaries with a history of falls. The difference between elderly rural Black and elderly rural White beneficiaries was greater than 3 percentage points.
- Use of potentially harmful medication was avoided less often for elderly urban Hispanic beneficiaries with a history of falls than for elderly urban White beneficiaries with a history of falls. The difference between elderly urban Hispanic and elderly urban White beneficiaries was less than 3 percentage points. Use of potentially harmful medication was avoided less often for elderly rural Hispanic beneficiaries with a history of falls than for elderly rural White beneficiaries with a history of falls. The difference between elderly rural Hispanic and elderly rural White beneficiaries was greater than 3 percentage points.

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\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

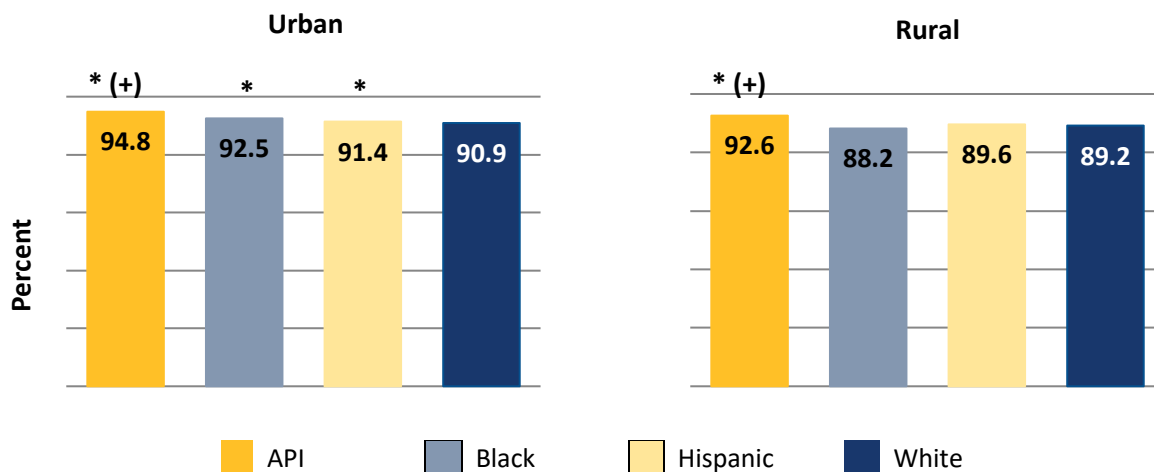
(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

<sup>†</sup> This includes anticonvulsants, nonbenzodiazepine hypnotics, selective serotonin reuptake inhibitors (SSRIs), antiemetics, antipsychotics, benzodiazepines, and tricyclic antidepressants.

## Avoiding Use of High-Risk Medications in the Elderly

Percentage of MA enrollees aged 65 years and older who were not prescribed a high-risk medication, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Use of high-risk medication was avoided more often for urban API beneficiaries than for urban White beneficiaries. The difference between urban API and urban White beneficiaries was greater than 3 percentage points. Use of high-risk medication was avoided more often for rural API beneficiaries than for rural White beneficiaries. The difference between rural API and rural White beneficiaries was greater than 3 percentage points.
- Use of high-risk medication was avoided more often for urban Black beneficiaries than for urban White beneficiaries. The difference between urban Black and urban White beneficiaries was less than 3 percentage points. Use of high-risk medication was avoided about as often for rural Black beneficiaries as for rural White beneficiaries.
- Use of high-risk medication was avoided more often for urban Hispanic beneficiaries than for urban White beneficiaries. The difference between urban Hispanic and urban White beneficiaries was less than 3 percentage points. Use of high-risk medication was avoided about as often for rural Hispanic beneficiaries as for rural White beneficiaries.

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\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

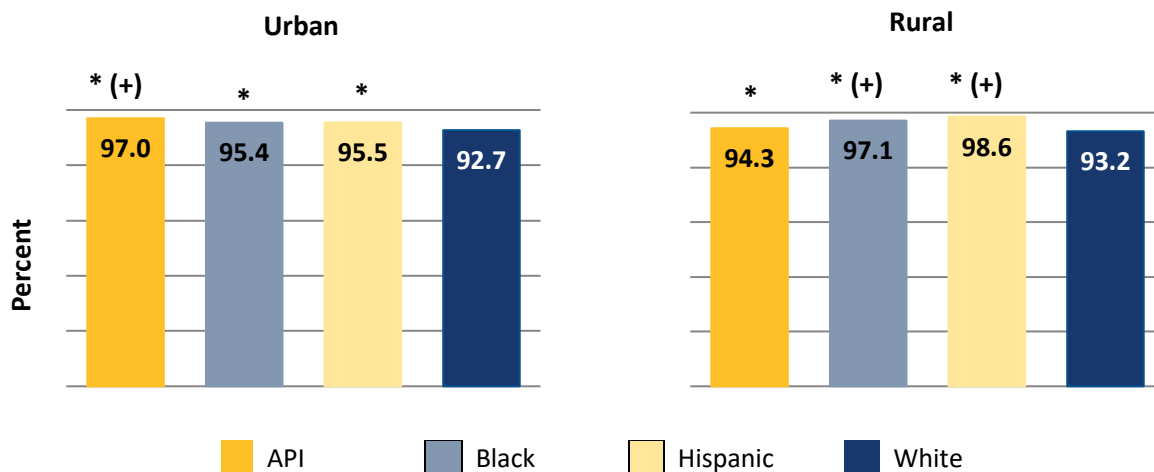
For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## Avoiding Use of Opioids at High Dosage

Percentage of MA enrollees aged 18 years and older who were not prescribed opioids at a high dosage<sup>†</sup> for more than 14 days, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Use of opioids at a high dosage<sup>†</sup> for more than 14 days was avoided more often for urban API beneficiaries than for urban White beneficiaries. The difference between urban API and urban White beneficiaries was greater than 3 percentage points. Use of opioids at a high dosage for more than 14 days was avoided more often for rural API beneficiaries than for rural White beneficiaries. The difference between rural API and rural White beneficiaries was less than 3 percentage points.
- Use of opioids at a high dosage for more than 14 days was avoided more often for urban Black beneficiaries than for urban White beneficiaries. The difference between urban Black and urban White beneficiaries was less than 3 percentage points. Use of opioids at a high dosage for more than 14 days was avoided more often for rural Black beneficiaries than for rural White beneficiaries. The difference between rural Black and rural White beneficiaries was greater than 3 percentage points.
- Use of opioids at a high dosage for more than 14 days was avoided more often for urban Hispanic beneficiaries than for urban White beneficiaries. The difference between urban Hispanic and urban White beneficiaries was less than 3 percentage points. Use of opioids at a high dosage for more than 14 days was avoided more often for rural Hispanic beneficiaries than for rural White beneficiaries. The difference between rural Hispanic and rural White beneficiaries was greater than 3 percentage points.

\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

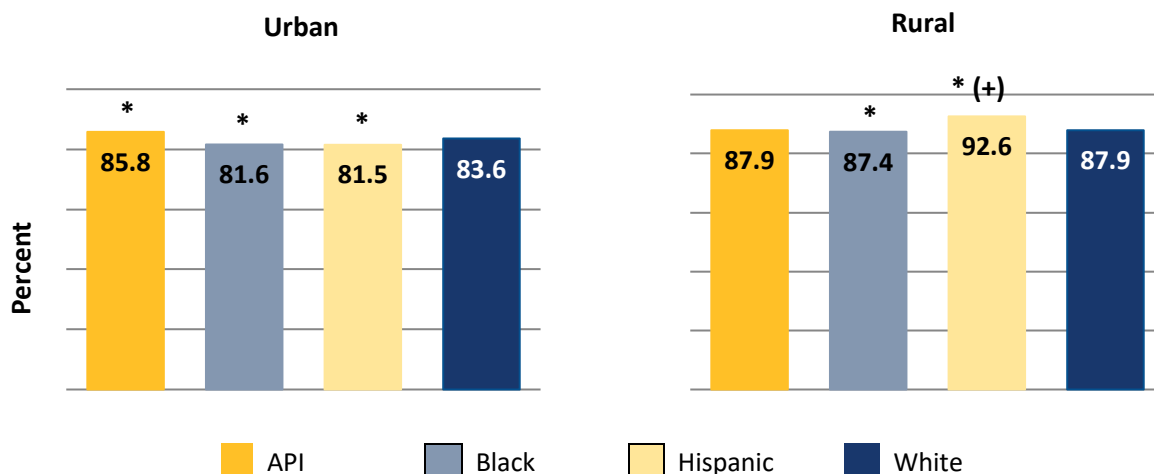
(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

<sup>†</sup> Average morphine equivalent dose > 120 mg

## Avoiding Use of Opioids from Multiple Prescribers

Percentage of MA enrollees aged 18 years and older who did not receive prescriptions for opioids from four or more prescribers in the past year, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Use of opioids from multiple prescribers was avoided more often for urban API beneficiaries than for urban White beneficiaries. The difference between urban API and urban White beneficiaries was less than 3 percentage points. Use of opioids from multiple prescribers was avoided about as often for rural API beneficiaries as for rural White beneficiaries.
- Use of opioids from multiple prescribers was avoided less often for urban Black beneficiaries than for urban White beneficiaries. The difference between urban Black and urban White beneficiaries was less than 3 percentage points. Use of opioids from multiple prescribers was avoided less often for rural Black beneficiaries than for rural White beneficiaries. The difference between rural Black and rural White beneficiaries was less than 3 percentage points.
- Use of opioids from multiple prescribers was avoided less often for urban Hispanic beneficiaries than for urban White beneficiaries. The difference between urban Hispanic and urban White beneficiaries was less than 3 percentage points. Use of opioids from multiple prescribers was avoided more often for rural Hispanic beneficiaries than for rural White beneficiaries. The difference between rural Hispanic and rural White beneficiaries was greater than 3 percentage points.

\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

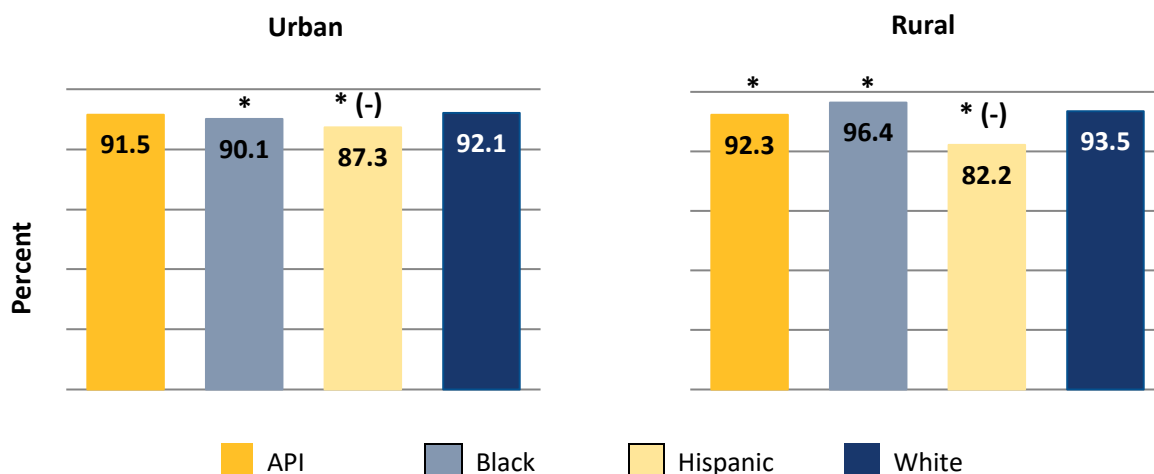
For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## Avoiding Use of Opioids from Multiple Pharmacies

Percentage of MA enrollees aged 18 years and older who did not receive prescriptions for opioids from four or more pharmacies in the past year, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Use of opioids from multiple pharmacies was avoided about as often for urban API beneficiaries as for urban White beneficiaries. Use of opioids from multiple pharmacies was avoided less often for rural API beneficiaries than for rural White beneficiaries. The difference between rural API and rural White beneficiaries was less than 3 percentage points.
- Use of opioids from multiple pharmacies was avoided less often for urban Black beneficiaries than for urban White beneficiaries. The difference between urban Black and urban White beneficiaries was less than 3 percentage points. Use of opioids from multiple pharmacies was avoided more often for rural Black beneficiaries than for rural White beneficiaries. The difference between rural Black and rural White beneficiaries was less than 3 percentage points.
- Use of opioids from multiple pharmacies was avoided less often for urban Hispanic beneficiaries than for urban White beneficiaries. The difference between urban Hispanic and urban White beneficiaries was greater than 3 percentage points. Use of opioids from multiple pharmacies was avoided less often for rural Hispanic beneficiaries than for rural White beneficiaries. The difference between rural Hispanic and rural White beneficiaries was greater than 3 percentage points.

\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

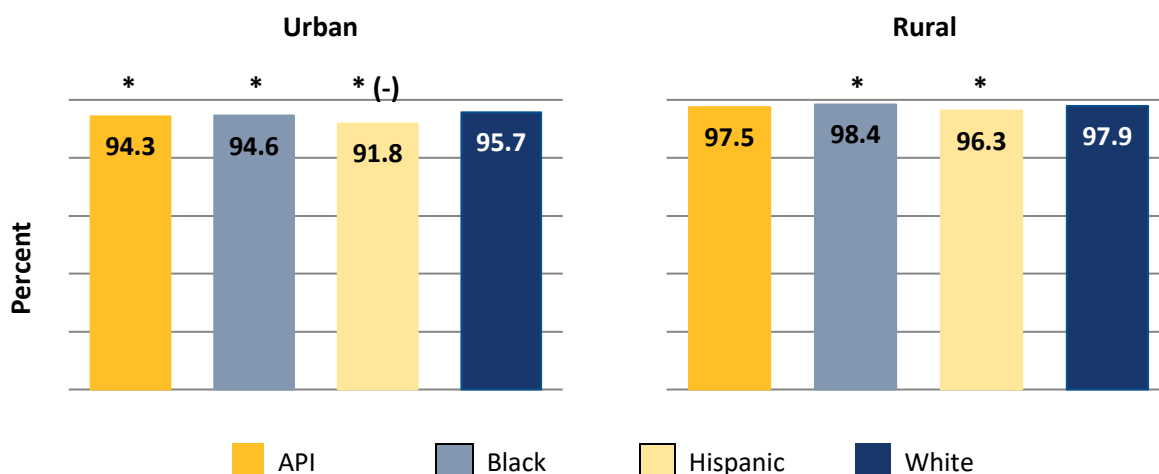
For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

- (+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.
- (-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.



## Avoiding Use of Opioids from Multiple Prescribers and Pharmacies

Percentage of MA enrollees aged 18 years and older who did not receive prescriptions for opioids from four or more prescribers and four or more pharmacies in the past year, by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

### Disparities

- Use of opioids from multiple prescribers and pharmacies was avoided less often for urban API beneficiaries than for urban White beneficiaries. The difference between urban API and urban White beneficiaries was less than 3 percentage points. Use of opioids from multiple prescribers and pharmacies was avoided about as often for rural API beneficiaries as for rural White beneficiaries.
- Use of opioids from multiple prescribers and pharmacies was avoided less often for urban Black beneficiaries than for urban White beneficiaries. The difference between urban Black and urban White beneficiaries was less than 3 percentage points. Use of opioids from multiple prescribers and pharmacies was avoided more often for rural Black beneficiaries than for rural White beneficiaries. The difference between rural Black and rural White beneficiaries was less than 3 percentage points.
- Use of opioids from multiple prescribers and pharmacies was avoided less often for urban Hispanic beneficiaries than for urban White beneficiaries. The difference between urban Hispanic and urban White beneficiaries was greater than 3 percentage points. Use of opioids from multiple prescribers and pharmacies was avoided less often for rural Hispanic beneficiaries than for rural White beneficiaries. The difference between rural Hispanic and rural White beneficiaries was less than 3 percentage points.

\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

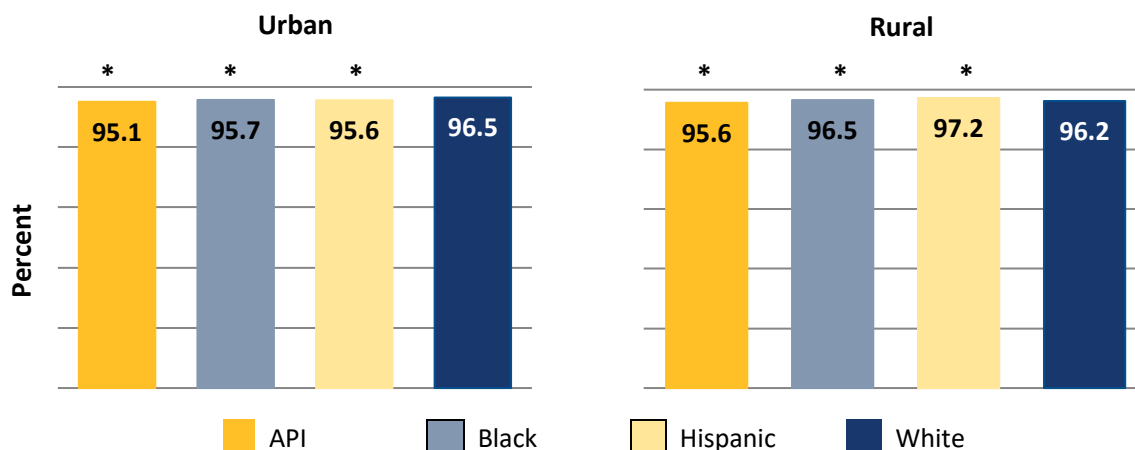
(+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.

(-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## Clinical Care: Access/Availability of Care

### Older Adults' Access to Preventive/Ambulatory Services

Percentage of MA enrollees aged 65 years and older who had an ambulatory or preventive care visit,  
by race and ethnicity within urban and rural areas, 2018



**SOURCE:** Clinical quality data collected in 2018 from MA plans nationwide. Clinical quality data not available for Medicare FFS beneficiaries.

**NOTES:** API = Asian or Pacific Islander. Racial groups such as Blacks and Whites are non-Hispanic. Those who endorsed Hispanic ethnicity were classified as Hispanic regardless of races selected.

#### Disparities

- Urban API beneficiaries were less likely than urban White beneficiaries to have had an ambulatory or preventive care visit. The difference between urban API and urban White beneficiaries was less than 3 percentage points. Rural API beneficiaries were less likely than rural White beneficiaries to have had an ambulatory or preventive care visit. The difference between rural API and rural White beneficiaries was less than 3 percentage points.
- Urban Black beneficiaries were less likely than urban White beneficiaries to have had an ambulatory or preventive care visit. The difference between urban Black and urban White beneficiaries was less than 3 percentage points. Rural Black beneficiaries were more likely than rural White beneficiaries to have had an ambulatory or preventive care visit. The difference between rural Black and rural White beneficiaries was less than 3 percentage points.
- Urban Hispanic beneficiaries were less likely than urban White beneficiaries to have had an ambulatory or preventive care visit. The difference between urban Hispanic and urban White beneficiaries was less than 3 percentage points. Rural Hispanic beneficiaries were more likely than rural White beneficiaries to have had an ambulatory or preventive care visit. The difference between rural Hispanic and rural White beneficiaries was less than 3 percentage points.

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\* Significantly different from the score for White residents of the same locality ( $p < 0.05$ ).

For statistically significant differences between Whites and racial or ethnic minorities of the same locality, the following symbols are also used when applicable:

- (+) Difference is  $\geq 3$  points (prior to rounding) and favors the racial or ethnic minority group.
- (-) Difference is  $\geq 3$  points (prior to rounding) and favors Whites.

## Appendix: Data Sources and Methods

### *The Medicare Consumer Assessment of Healthcare Providers and Systems Surveys*

The Medicare Consumer Assessment of Healthcare Providers and Systems (CAHPS) survey consists of a set of mail surveys with telephone follow-ups based on a stratified random sample of Medicare beneficiaries, with contracts serving as strata for Medicare Advantage (MA) beneficiaries and for fee-for-service (FFS) beneficiaries enrolled in prescription drug plans (PDPs) and states serving as strata for FFS beneficiaries not enrolled in a PDP. The 2018 survey attempted to contact 875,189 Medicare beneficiaries and received responses from 339,316, a 39 percent response rate. The 2018 survey represents all FFS beneficiaries, MA beneficiaries from 434 MA contracts that either were required to report (minimum of 600 eligible enrollees) or reported voluntarily (450–599 enrollees), and PDP beneficiaries from 54 PDP contracts with at least 1,500 eligible enrollees.

### *The Healthcare Effectiveness Data and Information Set*

The Healthcare Effectiveness Data and Information Set (HEDIS) consists of more than 90 measures across six domains of care (National Committee for Quality Assurance [NCQA], 2019). These domains include effectiveness of care, access/availability of care, experience of care, utilization and risk-adjusted utilization, relative resource use, and health plan descriptive information. HEDIS measures are developed, tested, and validated under the direction of NCQA. Although CAHPS data are collected only via surveys, HEDIS data are gathered both via surveys and via medical charts and insurance claims for hospitalizations, medical office visits, and procedures. In selecting HEDIS measures to include in this report, we excluded measures that underwent a recent change in specification, were similar to reported measures preferred by the Centers for Medicare & Medicaid Services (CMS), or were deemed unsuitable for this application by CMS experts. HEDIS data are available only for MA beneficiaries.

### *Information on Geography*

Beneficiaries were classified as living in a rural or urban area based on the zip code of their mailing address and the corresponding Census Bureau core-based statistical area (CBSA). CBSAs consist of the county or counties or equivalent entities associated with at least one core urban area plus adjacent counties having a high degree of social and economic integration with the core as measured through commuting ties with the counties that make up the core. Metropolitan statistical areas contain a core urban area of 50,000 or more population. Micropolitan statistical areas contain a core urban area of at least 10,000 but less than 50,000 population. For this report, any beneficiary residing within a metropolitan statistical area was classified as an urban resident; any beneficiary living in a micropolitan statistical area or outside of a CBSA was classified as a rural resident.

### *Information on Race/Ethnicity*

The 2018 CAHPS survey asked beneficiaries, “Are you of Hispanic or Latino origin or descent?” The response options were: “Yes, Hispanic or Latino” and “No, not Hispanic or Latino.” The survey then asked, “What is your race? Please mark one or more,” with response options of “White,” “Black or African American,” “Asian,” “Native Hawaiian or other Pacific Islander,” and “American Indian or Alaska Native.” Following a U.S. Census approach, answers to these two questions were used to classify respondents into 1 of 7 mutually exclusive categories: Hispanic, multiracial, American Indian/Alaska Native (AI/AN), Asian/Pacific Islander (API), Black, White, or unknown.

- Respondents who endorsed Hispanic ethnicity were classified as Hispanic regardless of races endorsed.

- Non-Hispanic respondents who endorsed two or more races were classified as multiracial, with a single exception: Those who selected both “Asian” and “Native Hawaiian or other Pacific Islander” but no other race were classified as API.
- Non-Hispanic respondents who selected exactly one race were classified as AI/AN, API, Black, or White, according to their responses.
- Respondents without data regarding race/ethnicity were classified as unknown.
- Unknown cases were dropped from the analysis. The multiracial group was included in the analysis, but estimates for this group are not presented in this report.

HEDIS data, unlike CAHPS data, do not contain the patient’s self-reported race/ethnicity. Therefore, we imputed race/ethnicity for the HEDIS data using a methodology that combines information from administrative data, surname, and residential location (Haas et al., 2019). This methodology is recommended for estimating racial/ethnic disparities for Black, Hispanic, API, and White beneficiaries, but not for AI/AN or multiracial beneficiaries. In 2018, there were 505 MA contracts that supplied the 16,182,932 HEDIS measure records used.

Comparisons of rural-urban differences in patient experience by racial and ethnic group and racial and ethnic differences in patient experience by geography focus on AI/AN, API, Black, Hispanic, and White beneficiaries. Comparisons of rural-urban differences in clinical care by racial and ethnic group and racial and ethnic differences in clinical care by geography focus on API, Black, Hispanic, and White beneficiaries. Estimates of clinical care delivered to AI/AN beneficiaries were excluded for the reason noted above.

#### *Analytic Approach*

The CAHPS measures presented in this report are composite measures that summarize, through averaging, the answers to two or more related CAHPS survey questions, or items. The annual flu vaccine measure is included in the CAHPS survey and is thus grouped with other CAHPS measures in this report. It is, however, considered to be a HEDIS measure. This is a single-item measure rather than a composite.

CAHPS estimates for rural and urban residents are from case-mix adjusted linear regression models that contained health contract intercepts, an indicator of rural residence (urban was the reference group), and the following case-mix adjustors: age, education, self-rated health and mental health, dual eligibility/low-income subsidy, and proxy status. No adjustment was made for survey language. CAHPS estimates for rural and urban residents of different racial/ethnic backgrounds are from case-mix adjusted linear regression models stratified by racial/ethnic group. These models contained health contract intercepts, an indicator of rural residence, and the same set of case-mix adjustors used in the overall rural-urban models.

Predicted probabilities of race/ethnicity were used as weights to develop HEDIS-measure estimates for racial/ethnic subgroups (Elliott et al., 2009). None of the HEDIS measures reported (including the annual flu vaccine measure) is case-mix adjusted.

Cases with missing data on outcome measures were excluded from the analysis. There were no missing data on predictors (race/ethnicity and rural/urban residence) included in the analyses of HEDIS measures. For analyses of CAHPS measures, cases with missing information on race/ethnicity (about 4 percent) were excluded from the analysis, and missing data on case-mix adjustors were imputed using the health contract mean. There were no missing data on rural/urban residence.

Statistical significance tests were used to compare the model-estimated scores for rural residents with the score for urban residents and to compare model-estimated scores for racial/ethnic minority groups with scores for Whites. A difference in scores is denoted as statistically significant if there is less than a 5-percent chance that the difference could have resulted due to sampling error alone. Differences that are statistically significant and larger than 3 points on a 0–100 scale (CAHPS) or 3 percentage points

(HEDIS) are further denoted as practically significant. That is, in the charts that present national data on rural-urban differences in patient experience (CAHPS) and clinical care (HEDIS), differences that are not statistically significant or are statistically significant but less than 3 points in magnitude are distinguished (using symbols and labeling) from differences that are both statistically significant and 3 points in magnitude or larger. The 3-point criterion was selected because a difference of this size is considered to be of moderate magnitude (Paddison et al., 2013).



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This report has been reviewed in draft form by individuals chosen for their diverse perspectives and technical expertise. The purpose of this independent review is to provide candid and critical comments that will assist the institution in making its published report as sound as possible and to ensure that the report meets institutional standards for objectivity, evidence, and responsiveness to the study charge. The review comments and draft manuscript remain confidential to protect the integrity of the deliberative process. We wish to thank the following individuals for their review of this report:

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Although the reviewers listed above have provided many constructive comments and suggestions, they were not asked to endorse the conclusions or recommendations nor did they see the final draft of the report before its release. The review of this report was overseen by **GEORGES C. BENJAMIN**, American Public Health Association, and **CHARLES E. PHELPS**, University of Rochester. They were responsible for making certain that an independent examination of this report was carried out in accordance with institutional procedures and that all review comments were carefully considered. Responsibility for the final content of this report rests entirely with the authoring committee and the institution.



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## Summary

The Centers for Medicare & Medicaid Services (CMS) are steadily moving from paying for volume (fee-for-service payments) to paying for quality, outcomes, and costs (value-based payment, or VBP) in the traditional Medicare program. Since Congress enacted the Patient Protection and Affordable Care Act of 2010, CMS has implemented a variety of VBP models, including quality incentives and risk-based, alternative payment models (APMs) (Burwell, 2015). In this report both types of strategies are referred to broadly as VBP. Financial incentives such as pay-for-performance programs link financial bonuses and/or penalties to quality or value (NASEM, 2016a). APMs include episode-based payments and population-based (global) payments, shifting greater financial risk to providers to hold them accountable for the quality and efficiency of care they provide, as well as health outcomes achieved (NASEM, 2016a). Although not considered entirely VBP models, Medicare Part C (i.e., Medicare Advantage) and Part D also have design features that tie quality and cost performance to payment (e.g., risk sharing and bonus payments).

Stakeholders have raised concerns that current Medicare quality measurement and payment programs, and VBP programs in particular, that do not account for social risk factors may underestimate the quality of care provided by providers disproportionately serving socially at-risk populations. (Note, the term *provider* in this report refers to the reporting unit [or, provider setting] being evaluated—e.g., hospitals, health plans, provider groups, etc.) Patients with social risk factors may require more resources and more intensive care to achieve certain health outcomes compared to the resources and care needed to achieve those same outcomes in more advantaged patients (NASEM, 2016b). At the same time, because these providers are also more likely to care for patients who are uninsured or covered by Medicaid, they have historically been less well funded than providers caring for larger proportions of patients with commercial insurance that pay more generously for care. If providers disproportionately serving vulnerable populations are likely to have fewer resources to begin with and care for patients who require more resources to achieve the same health care outcomes, these providers may be more likely to fare poorly on quality rankings (Chien et al., 2007; Joynt and Rosenthal, 2012; Ryan, 2013). The poorer average performance among providers disproportionately serving socially at-risk populations combined with the fact that they have fewer resources has raised concerns that Medicare's VBP programs may potentially increase disparities. Similar concerns apply to capitated payments made to Medicare Part C health plans.

## STATEMENT OF TASK

In response to concerns about health equity and accuracy in reporting and to the Improving Medicare Post-Acute Care Transformation (IMPACT) Act approved by Congress in 2014, the Department of Health and Human Services (HHS) acting through the Office of the Assistant Secretary for Planning and Evaluation (ASPE) contracted with the National Academies of Sciences, Engineering, and Medicine to convene an ad hoc committee to identify criteria for selecting social risk factors, specific social risk factors Medicare could use, and methods of accounting for those factors in Medicare quality measurement and payment applications. The committee comprises expertise in health care quality, clinical medicine, health services research, health disparities, social determinants of health, risk adjustment, and Medicare programs (see Appendix B for biographical sketches).

This report is the third in a series of five brief reports that aim to inform ASPE analyses that account for social risk factors in Medicare payment programs mandated through the IMPACT Act. In the first report, the committee presented a conceptual framework and described the results of a literature search linking five social risk factors and health literacy to health-related measures of importance to Medicare quality measurement and payment programs—referred to in this report as *performance indicators used in VBP*. In the second report, the committee reviewed the performance of providers disproportionately serving socially at-risk populations, discussed drivers of variations in performance, and identified six community-informed and patient-centered systems practices that show promise to improve care for socially at-risk populations. Details of the statement of task and the sequence of reports can be found in Box 1-1. The committee will release reports every 3 months, addressing each item in the statement of task in turn. The statement of task requests committee recommendations only in the fourth report.

This report builds on the conceptual relationships and empirical associations between social risk factors and performance indicators used in VBP identified in the first report to provide guidance on which factors could be considered for Medicare accounting purposes, criteria to identify these factors, and methods to do so in ways that can improve care and promote greater health equity for socially at-risk patients. To that end, the committee also aims to address issues that must be carefully considered to maintain or enhance provider incentives to improve care for socially at-risk patients throughout the report while also promoting accuracy in reporting and compensating providers fairly. The committee's goals in accounting for social risk factors in Medicare payment programs are:

1. Reducing disparities in access, quality, and outcomes;
2. Quality improvement and efficient care delivery for all patients;
3. Fair and accurate public reporting; and
4. Compensating providers fairly.

To achieve these goals, accounting for social risk factors should neither mask low-quality care or health disparities nor reward poor performance. Additionally, inclusion of social risk factors in quality measurement and payment should not disincentivize providers from finding strategies to overcome the influence of social risk factors on health care outcomes.

## CRITERIA FOR SELECTING SOCIAL RISK FACTORS

The primary goal of the criteria is to guide selection of social risk factors that could be accounted for in VBP so that providers or health plans are rewarded for delivering quality and value independent of whether they serve patients with relatively low or high levels of social risk factors. Under VBP, providers who care for patients who would score lower on the measures of performance as a result of factors outside of the providers' control (such as certain social risk factors), rather than as a result of the quality of care delivered, should not be penalized because of the influence of these non-modifiable factors. The effect of these other factors should be minimized. In sum, the criteria should guide identification of social risk factors that could be accounted for in performance indicators used in VBP to promote accuracy in reporting.

The criteria put forth by this committee adhere closely to the guidelines for selecting risk factors developed by the National Quality Forum (NQF) in their 2014 report *Risk Adjustment for Socioeconomic Status or Other Sociodemographic Factors*. Like NQF, the committee's criteria explicitly focuses on selecting risk factors that will be applied to adjustment of performance indicators used for VBP. However, the committee's criteria reflect the need to apply to a broader range of methods to account for social risk factors. Criteria developed to select risk factors for prior risk adjustment models that the committee reviewed and drew upon in developing their criteria are listed in Appendix A.

*Conclusion 1: Three overarching considerations encompassing five criteria could be used to determine whether a social risk factor should be accounted for in performance indicators used in Medicare value-based payment programs. They are:*

- A. *The social risk factor is related to the outcome.*
  1. *The social risk factor has a conceptual relationship with the outcome of interest.*
  2. *The social risk factor has an empirical association with the outcome of interest.*
- B. *The social risk factor precedes care delivery and is not a consequence of the quality of care.*
  3. *The social risk factor is present at the start of care.*
  4. *The social risk factor is not modifiable through provider actions.*
- C. *The social risk factor is not something the provider can manipulate.*
  5. *The social risk factor is resistant to manipulation or gaming.*

These criteria are described and summarized in Table S-1, along with the rationale and limitations of each criterion, as well as practical considerations.

**TABLE S-1** Criteria for Selecting Social Risk Factors for Application in Medicare Quality Measurement and Payment, Rationale, and Potential Challenges

Criteria	Rationale	Challenges/Limitations	Practical Considerations
<p><b>A. The social risk factor is related to the outcome.</b></p> <p><i>This category is the most basic pair of criteria for a social risk factor—that there be both a plausible and valid reason why the risk factor would be associated with the outcome and empirical evidence that such a relationship holds in practice. Together these criteria lay the foundation for the validity and practical importance of the risk factor.</i></p>			
1. Conceptual relationship with the outcome of interest	A conceptual relationship informed by research and experience ensures that there is a reasonable conceptual basis for expecting a systematic relationship.	A conceptual relationship may not be consistent over time or across settings. It is not always possible to distinguish unique causal roles of factors, so usefulness in an adjustment model does not necessarily imply that outcomes would improve through interventions on risk factor.	Acceptability and face validity: Some factors may be indicated empirically, but would need to be excluded because it has poor face validity or because data would be unacceptable to collect and include.
2. Empirical association with the outcome of interest	An empirical association confirms the conceptual relationship. Without this criterion, an adjustor (social risk factor) may have no effect.	Empirical evidence may not be generalizable to the particular setting. The relationship may not hold in a multivariate model.	<p>Data limitations often represent a practical constraint to what factors are included in risk models. The aim is to reliably and feasibly capture accurate data. The challenge is to push for greater reliability and feasibility of factors that may be important to include, even if factors are excluded today, because it is currently infeasible. Privacy laws and concerns about patient confidentiality may also be an issue.</p> <p>Contribution of unique variation in the outcome (i.e., not redundant or highly correlated with another risk factor): Prevent overfitting and unstable estimates, or coefficients that appear to be in the wrong direction; reduce data collection burden.</p>

Criteria	Rationale	Challenges/Limitations	Practical Considerations
<p><b>B. The social risk factor precedes care delivery and is not a consequence of the quality of care.</b></p> <p><i>Factors that reflect a model of care delivery, a treatment decision, or the direct consequences of care or treatment decision are not appropriate adjusters, as they reflect true differences in quality of care or other outcomes.</i></p>			
3. The risk factor is present at the start of care.	If a risk factor is present at the start of care, then it is less likely that it would be the result of care provided.	Does not eliminate a risk factor being a consequence of care delivery in dynamic settings or under population health settings.	<p>Prioritize slowly changing factors over rapidly changing variables: Measurement would have to be more frequent, but rapidly changing variables would not fully disqualify a measure.</p> <p>Consider whether a factor represents a cumulative life cycle effect or a transient effect.</p>
4. The risk factor is not modifiable through the provider's actions.	The goal is to adjust for factors independent of the care provided. Adjusting for the care provided contravenes this goal.	It may be difficult to identify in practice the extent to which care provision might affect a particular social risk factor.	
<p><b>C. The social risk factor is not something that the provider can manipulate.</b></p>			
5. The risk factor is resistant to manipulation or gaming.	This criterion ensures validity of performance score as representing quality of care (versus, for example, upcoding).	It is often difficult to anticipate how a measure might be manipulated.	<p>Prioritize specific coding over vague coding: vague codes are more vulnerable to manipulation; however, there are vaguely coded variables that may be important nevertheless, so this would not fully disqualify an indicator.</p> <p>Prioritize continuous over dichotomous measures of the same construct where applicable to reduce "edge" gaming.</p> <p>Carefully monitor high-leverage factors (i.e., risk factors that are not prevalent but highly predictive of outcomes), as they may be important but especially attractive for gaming.</p>

## APPLYING CRITERIA TO SOCIAL RISK FACTORS AND HEALTH LITERACY

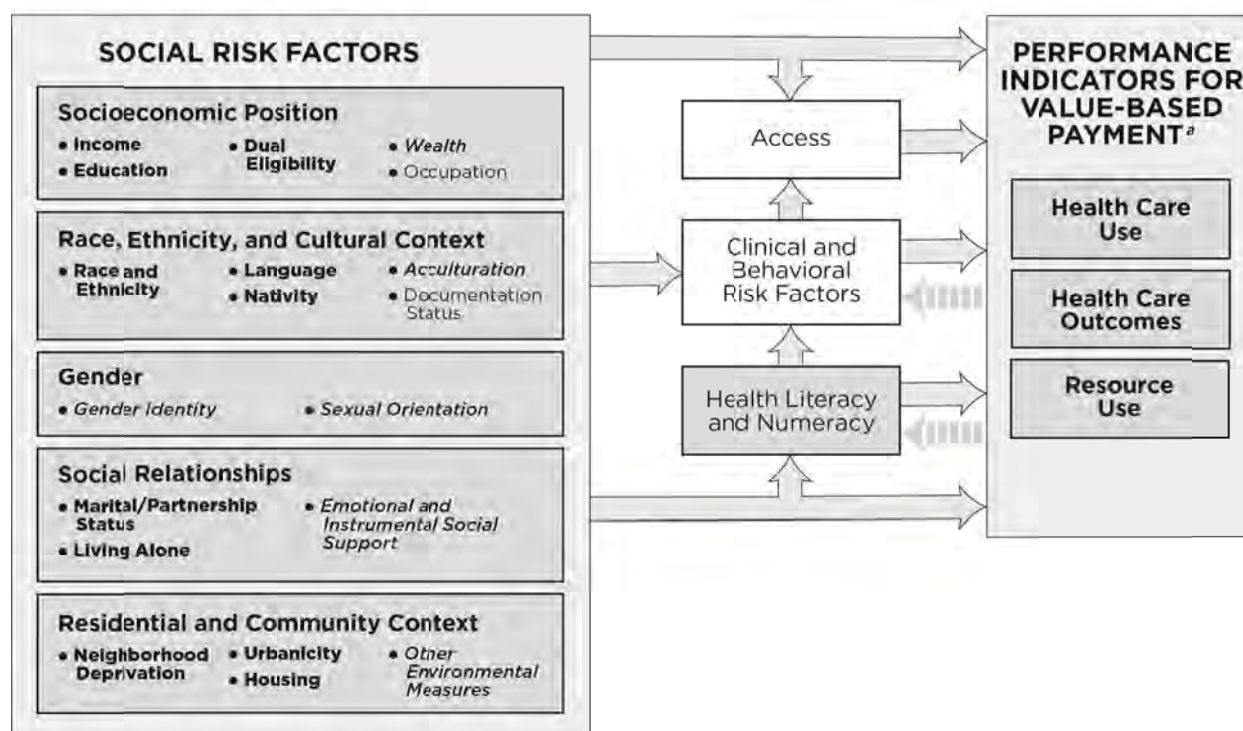
The conceptual framework presented in the committee's first report illustrates the primary hypothesized conceptual pathways by which five social risk factors (socioeconomic position [SEP]; race, ethnicity, and cultural context; gender; social relationships; and residential and community context) as well as health literacy may directly or indirectly affect performance indicators used in Medicare VBP programs (NASEM, 2016a). As described in the committee's first report, the conceptual framework applies to all Medicare beneficiaries, including beneficiaries with disabilities and those with end-stage renal disease. The committee also identified specific indicators that correspond to the social risk factors. These indicators represent ways to measure the latent constructs of the social risk factors and are distinct from specific measures.

Figure S-1 illustrates the primary hypothesized relationships between social risk factors and health literacy and performance indicators used in VBP. The committee applied the selection criteria they developed to the five social risk factors (and their respective indicators) and health literacy, and also describes the rationale and limitations of each factor and indicator relative to those criteria.



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**FIGURE S-1** Conceptual framework of social risk factors and performance indicators for value-based payment (VBP).

NOTES: This conceptual framework illustrates primary hypothesized conceptual relationships. For the indicators listed in bullets under each social risk factor, bold lettering denotes measurable indicators that could be accounted for in Medicare VBP programs in the short-term, italicized lettering denotes measurable indicators that capture the basic underlying constructs and currently present practical challenges, but are worth attention for potential inclusion in accounting methods in Medicare value-based payment programs in the longer term; and plain lettering denotes indicators that have considerable limitations.

<sup>a</sup> As described in the conceptual framework outlining primary hypothesized conceptual relationships between social risk factors and outcomes used in VBP presented in the committee's first report (NASSEM, 2016a), health care use captures measures of utilization and clinical processes of care; health care outcomes capture measures of patient safety, patient experience, and health outcomes; and resource use captures cost measures.

## Socioeconomic Position

SEP is commonly measured using indicators including income and wealth, education, and occupation and employment. In the medical field, insurance status is also used as a proxy for SEP. Income and education are promising indicators of SEP, because they are related to health care outcomes of interest, precede care delivery and are not a consequence of the quality of care, and meet practical considerations; measures are likely to be resistant to gaming and manipulation. Wealth is likely to be strongly associated with health and health care outcomes, but accurate data is difficult to collect. Dual eligibility as a proxy for SEP is also an available measure that meets practical criteria. Because dual eligibility captures elements of income, wealth, and health status, dual eligibility can be considered a broader measure of health-related

resource availability that captures medical need. Occupation is likely to be strongly associated with performance indicators used in VBP, but practical considerations limit its potential use.

### **Race, Ethnicity, and Cultural Context**

Indicators in this category include race, ethnicity, language, nativity, immigration history, and acculturation. Race, ethnicity, language (especially limited English proficiency), and nativity (i.e., foreign-born versus U.S. born; country of origin) are promising indicators, particularly in combination. Literature supports a conceptual relationship between acculturation and health care outcomes of interest, but existing measures have limitations, and empirical evidence is lacking. Documentation status as a measure of immigration history is likely to be sensitive to collect.

### **Gender**

Normative gender categories (men and women) are strong candidates for inclusion in accounting methods, despite the fact that effects of gender are difficult to separate from biological effects of sex empirically. However, the committee notes that gender is already included in clinical risk adjustment. The relationship between gender identity (describing individuals who identify as transgender, intersex, or otherwise nonconforming gender) and sexual orientation (describing individuals who identify as lesbian, gay, bisexual, queer, questioning, or otherwise nonconforming) and health care outcomes is not well established. HHS is currently testing and collecting data on promising measures of gender identity and sexual orientation that could be revisited for potential inclusion when there is more evidence of an effect. In the short term, there is likely to be very low prevalence of individuals who have nonnormative gender identities. Thus, accounting for variations in gender identity is unlikely to have a significant effect in accounting methods.

### **Social Relationships**

Social relationships are typically assessed using three indicators in health research: marital/partnership status, living alone, and emotional and instrumental social support. Marital/partnership status and living alone are likely to influence health and health care outcomes, are easy to measure, and may at least partly capture elements of emotional and instrumental social support. Some evidence suggests that the relationship between marital/partnership status and health is changing along with demographic shifts, which point to a need to reassess the empirical associations and revisit assumptions about the conceptual relationship over time. Emotional social support and instrumental social support are likely to influence health care outcomes. However, because social support is multidimensional, identifying the measure that represents the most relevant dimension for a given health care outcome may pose both conceptual and practical challenges for data collection and measurement.

### **Residential and Community Context**

Residential and community context includes compositional characteristics that represent aggregate characteristics of neighborhood residents and characteristics of physical and social environments (i.e., environmental measures) (NASEM, 2016a). Compositional characteristics and environmental measures of residential and community context are related to health care

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outcomes, precede care delivery and are not a consequence of the quality of care, are not modifiable through provider action, and generally meet practical considerations, with some limitations. A measure of census tract-level neighborhood deprivation (i.e., a composite measure of neighborhood compositional characteristics) is likely a good proxy for a range of individual and true area-level constructs (compositional and environmental) relevant to performance indicators used in VBP. Measures of urbanicity and housing are also available. These measures are also feasible to obtain. Environmental measures are an emerging area of research and other measures could be revisited for potential inclusion when there is more empirical evidence and better measures.<sup>1</sup>

### Health Literacy

The committee does not conceive of health literacy as a social risk factor, but rather as the product of an individual's skills and abilities (e.g., reading and other critical skills), social and cultural factors, education, health system demands, and the health care context. However, the committee included health literacy in its conceptual framework and retained it for consideration in this report because health literacy is included in the committee's charge and because it is specifically mentioned in the IMPACT Act and therefore of interest to Congress. Additionally, social risk factors like education and language influence health literacy. Health literacy (capturing the related construct of numeracy) is related to health care outcomes of interest and generally meets practical considerations. However, provider actions can potentially mitigate the effects of low health literacy. Thus, to preserve incentives to provide effective care to patients with low health literacy, it may be not be desirable to adjust performance measures to account for differences in health literacy. Nevertheless, it may be desirable to otherwise compensate providers for the greater effort or costs required to provide health literate care and thereby produce good health care outcomes.

After applying the selection criteria to indicators of the five social risk factors and health literacy, the committee made the following conclusions:

*Conclusion 2: There are measurable social risk factors that could be accounted for in Medicare value-based payment programs in the short term. Indicators include*

- *Income, education, and dual eligibility;*
- *Race, ethnicity, language, and nativity;*

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<sup>1</sup> The committee sees no conflict between this report and the 2013 IOM report *Variation in Health Care Spending: Target Decision Making, Not Geography*, which recommended against using area-level payment adjustments to account for regional practice patterns. That committee's charge was to evaluate whether area-level differences in per-beneficiary spending were real and if so, to develop explanations for the variation. That report examined whether health care markets (characterized using relatively large geographies such as hospital service areas, hospital referral regions, or metropolitan statistical areas) were characterized by persistent patterns of spending driven by commonalities in medical decision making or other provider behavior and concluded that area spending variability was mainly due to price markups in the commercial insurance market and variation in the use of post-acute care in Medicare. In contrast, this report focuses on differences in performance indicators used in VBP (including variations in health care utilization and resource use, but also quality) driven by differences in social characteristics of a provider or other risk-bearing entity's patient population. The use of area-level measures is therefore at much smaller geographic units (e.g., census tracts of patient place of residence) and serves to more accurately characterize providers' patient populations in Medicare quality measurement and payment programs.

- *Marital/partnership status and living alone; and*
- *Neighborhood deprivation, urbanicity, and housing.*

*Conclusion 3: There are some indicators of social risk factors that capture the basic underlying constructs and currently present practical challenges, but they are worth attention for potential inclusion in accounting methods in Medicare value-based payment programs in the longer term. These include*

- *Wealth,*
- *Acculturation,*
- *Gender identity and sexual orientation,*
- *Emotional and instrumental social support, and*
- *Environmental measures of residential and community context.*

## **METHODS TO ACCOUNT FOR SOCIAL RISK FACTORS IN VALUE-BASED PAYMENT PROGRAMS**

When developing and selecting methods to account for social risk factors in VBP programs, understanding the type of incentive design is important for evaluating the potential benefits and challenges of various accounting methods. The incentive design will interact with the method used to account for social risk factor(s) and produce certain potential benefits and risks. Selecting the appropriate method (or, methods) to account for social risk factors will depend on the balance of these potential positive and negative consequences.

CMS payment models cover a spectrum of approaches from traditional fee-for-service to population-based payment models. Current Medicare financial incentive programs include

- Hospital-Acquired Condition Payment Reduction,
- Hospital Readmission Reductions Program,
- Hospital Value-Based Purchasing, and
- Physician Value-Based Modifier.

Current Medicare APMs include

- End-Stage Renal Disease Quality Incentive Program, and
- Medicare Shared Savings Program.

Other VBP mechanisms in Medicare payment programs include

- Medicare Advantage/Part C Star Ratings Bonus Payment and risk-adjusted capitation and
- Medicare Part D risk-adjusted capitation, individual reinsurance, and risk corridor adjustments.

VBP programs in development include

- Home Health Value-Based Purchasing,

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- Skilled Nurse Facility Value-Based Purchasing, and
- Medicare and CHIP Reauthorization Act of 2015 (MACRA).

The Center for Medicare & Medicaid Innovation also tests innovative payment models. In early 2016, CMS identified 10 APMs, including several innovative models for inclusion under MACRA (CMS, 2016), including (among others):

- Bundled Payment Care Improvement initiative
- Next Generation Accountable Care Organizations, and
- Comprehensive Primary Care Plus.

Given that the Medicare VBP landscape is evolving and CMS is moving towards more comprehensive population-based APMs, the committee identified methods that could apply to any VBP program, not just the existing ones.

### **Potential Harms of the Status Quo Compared to Accounting for Social Risk Factors**

Although adjustment for social risk factors could have important benefits, any proposal to account for social risk factors in Medicare payment programs will entail its own advantages and disadvantages that need to be carefully considered. The status quo (which does not account for social risk factors) has disadvantages that include incentives for providers and insurers to avoid serving patients with social risk factors, underpayment to providers who disproportionately serve socially at-risk populations, and underinvestment in quality of care. While proposals that do account for social risk factors would likely diminish these harms, there are also some potential ways in which accounting for social risk factors could incrementally introduce new harms. This includes reducing incentives to improve care for patients with social risk factors and limiting the ability of socially at-risk patients to identify providers who will deliver the best care for them. Neither an unadjusted or adjusted summary score provides information about which provider is better for a patient based on his or her level of social risk factors unless all providers are equally good or bad with all patients. Only stratification by social risk factors will reveal such insights. Additionally, any method that obscures differences due to poor quality could be unfair in terms of compensating providers who provide high-quality care. Finally, any method for accounting for social risk factors that holds providers to different standards for socially at-risk populations may create the perception that patients with social risk factors are entitled to a lower quality of care. Even if these concerns are unfounded, perceptions of inequitable treatment can further erode trust in the health care system among patients with social risk factors.

*Conclusion 4: It is possible to improve on the status quo with regard to the effect of value-based payment on patients with social risk factors. However, it is also important to minimize potential harms to these patients and to monitor the effect of any specific approach to accounting for social risk factors to ensure the absence of any unanticipated adverse effects on health disparities.*

### **Methods to Account for Social Risk Factors**

The committee's review of methods to account for social risk factors in Medicare VBP programs takes as the point of departure that the goals of Medicare payment and reporting



systems reducing disparities in health care access, affordability, quality, and outcomes; quality improvement and efficient care delivery for all patients; fair and accurate public reporting; and compensate providers fairly for the services they provide. Differences in quality by populations with social risk factors may reflect a combination of drivers, including mechanisms that occur during the patient–provider encounter (e.g., discrimination, bias), provider characteristics (e.g., fewer financial resources, fewer and lower-quality clinical/health care resources), and barriers to access and financial constraints for socially at-risk persons (NASEM, 2016b). In practice these mechanisms may occur simultaneously and also interact; it is difficult if not impossible to decompose observed differences into these components quantitatively. The committee therefore proposes approaches that do not require disentangling the mechanisms of these multiple pathways for social risk factors. The fact that some providers do well with socially at-risk populations does not imply that it is equally easy to do so on average, and such population differences may also affect the relationship between provider quality and observed provider scores. The standard for taking such factors into account should not be that it is impossible to provide optimal care, but that it is more difficult on average. Taking such factors into account need not “adjust away” disparities. Lower levels of performance for any group should not be reported as sufficient or receive maximum rewards. However, a provider that does not achieve performance on par with top performers (i.e., optimal care) could still be eligible for some reward because, for example, it improved substantially relative to its own benchmark.

*Conclusion 5: Characteristics of a public reporting and payment system that could accomplish the goals of reducing disparities in access, quality, and outcomes; quality improvement and efficient care delivery for all patients; fair and accurate public reporting; and compensating providers fairly include*

1. *Transparency and accountability for overall performance and performance with respect to socially at-risk members of the population;*
2. *Accurate performance measurement—with high reliability and without bias (systematic error) related to differences in populations served;*
3. *Incentives for improvement overall and for socially at-risk groups, both within reporting units (i.e., the provider setting that is being evaluated—hospitals, health plans, etc.) and between reporting units.*

The committee reviewed literature on a range of methods to account for risk factors in public reporting and payment systems for which inclusion of social risk factors may be appropriate, with the aim to be inclusive.

**Finding:** The committee identified four categories—(A) public reporting; (B) adjustment of performance measure scores; (C) direct adjustment of payments; and (D) restructuring payment incentive design—encompassing ten methods to account for social risk factors that could be used to address policy goals of reducing disparities in access, quality, and outcomes; quality improvement and efficient care delivery for all patients; fair and accurate public reporting; and compensating providers fairly.

Public reporting seeks to make overall quality visible—to consumers, providers, payers, and regulators (IOM, 2006). It may lead to quality improvement via reputation incentives, and particularly when linked to behavioral nudges, by increasing market share (i.e., influencing



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choice of provider) for higher-quality reporting units (IOM, 2006). Public reporting methods that could account for social risk factors include (1) stratification by patient characteristics within reporting units, and (2) stratification by reporting unit characteristics (e.g., comparing safety-net hospitals to peers).

Adjusting performance measure scores seeks to “level the playing field,” to estimate true reporting unit quality—that which would occur if all units had the population average patient. Social risk factors can be considered confounders of true performance if they are beyond provider control and unevenly distributed across units and thereby distort (bias) comparisons. Adjustment is a means to account for social risk factors statistically in an effort to more accurately measure true performance. Methods to adjust performance measure scores include (1) risk adjustment for mean within-provider differences, (2) risk adjustment for within- and between-provider differences, and (3) adding quality measures for performance for at-risk groups in addition to the overall measure.

VBP incorporates explicit or implicit (as in the case of bundled or global payment including shared savings) rewards or penalties based on performance on quality and/or cost of care. This can be achieved through three underlying conceptual approaches. First, payers could pay more to those that are doing a better job in the measurement period (i.e., pay for achievement). Second, payers could pay for the mix of patients the reporting unit treats, that is, pay more to those that treat greater numbers of socially at-risk patients under the assumption that they simply need more resources. This approach lacks incentives to improve unless some other system for accountability is superimposed. Third, payers could pay for improvement, that is, pay more to those who improve to a greater degree.

The committee also expands on how VBP could incorporate measures of social risk factors. Payments could be directly adjusted using social risk factors, or incentive design could be restructured. Direct adjustments of payment explicitly use measures of social risk factors, but by themselves do not affect performance measure scores. Methods include (1) risk adjustment in payment formula without adjusting measured performance, and (2) stratification of benchmarks used for payment. Restructuring payment incentive designs do not explicitly use measures of social risk factors, but implicitly account for social risk factors. Methods include (1) paying for improvement relative to a reporting unit’s own benchmark (to a greater extent or exclusively), including “growth models”; (2) downweighting social risk factor-sensitive measures in payment; and (3) adding a bonus for low disparities.

### Applying Methods to Account for Social Risk Factors

In many cases, methods from multiple categories can be used together. In some cases, multiple methods from a single category can be used in combination. In this respect, each approach has some advantages and disadvantages and a combination of approaches may yield a better result than any one method alone. The committee underscores that the benefits and harms of any single or composite method of accounting for social risk factors should be assessed in reference to the status quo or some other feasible alternative rather than a perfect world in which social risk factors do not confound efforts to improve the quality and efficiency of health care delivery (referred to by some as a “full information” scenario).

*Conclusion 6: To achieve goals of reducing disparities in access, quality, and outcomes; quality improvement and efficient care delivery for all patients; fair*

*and accurate public reporting; and compensating providers fairly, a combination of reporting and accounting in both measures and payment are needed.*

Considerations around the trade-offs of various methods of accounting for social risk factors are different for cost-related performance compared to quality performance. Costs in the context of VBP can refer to the costs of improving quality or achieving good outcomes for socially at-risk patient or to the cost of care billed to a payer. As noted earlier, because achieving high performance on performance indicators used in VBP may require greater investments on the part of health care providers and health plans to overcome barriers socially at-risk populations face, costs to achieve good outcomes and improve care quality for socially at-risk populations are likely to be higher than costs to achieve the same outcomes and improve care quality for more advantaged patients. Because at least some of these costs will be outside of the services that can be billed to payers like CMS, as described in an earlier section, a potential harm of not accounting for social risk factors in a VBP environment is that this increased cost may be a disincentive to care for socially at-risk populations. On the other hand, lower resource use observed in billed costs of care may reflect unmet need or barriers to access rather than the absence of waste. Thus, lower cost is not always better; whereas, higher quality is always better.

*Conclusion 7: Strategies to account for social risk factors for measures of cost and efficiency may differ from strategies for quality measurement, because observed lower resource use may reflect unmet need rather than the absence of waste, and thus lower cost is not always better, while higher quality is always better.*

### **Monitoring**

Both the status quo and any new approach to accounting for social risk factors will have uncertain tradeoffs in terms of the goals of reducing disparities in access, quality, and outcomes; quality improvement and efficient care delivery for all patients; fair and accurate public reporting; and compensating providers fairly. Many unknowable factors including provider and patient beliefs and behavioral responses will affect the results that any new system yields. Monitoring data on a variety of indicators will facilitate assessment of the effects of existing and new programs on potential unintended adverse effects—such as, enrollment (for health plans), patient complaints, access to and quality of care for socially at-risk populations, and the financial sustainability of providers disproportionately caring for socially at-risk populations.

*Conclusion 8: Any specific approach to accounting for social risk factors in Medicare quality and payment programs requires continuous monitoring with respect to the goals of reducing disparities in access, quality, and outcomes; quality improvement and efficient care delivery for all patients; fair and accurate public reporting; and compensating providers fairly.*

Finally, because behavioral and other responses to new systems may change the balance of risks and benefits over time, to take into account these behavioral and other responses, the specific approach to accounting for social risk factors may need to be reassessed.

## CONCLUDING REMARKS

The committee notes that it is not within its statement of task to recommend whether social risk factors should be accounted for in VPB or how; that decision sits elsewhere. The committee hopes that the conclusions in this report help CMS and the Secretary of HHS make that important decision. In the next report, the committee tackles the question of how to gather the data that could be used to account for social risk factors in Medicare VBP.

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## 1

## Introduction

The Centers for Medicare & Medicaid Services (CMS) are steadily moving from paying for volume (fee-for-service payments) to paying for quality, outcomes, and costs (value-based payment, or VBP) in the traditional Medicare program. Since Congress enacted the Patient Protection and Affordable Care Act of 2010, CMS has implemented a variety of value-based payment models including quality incentives and risk-based, alternative payment models (APMs) (Burwell, 2015). Quality incentives such as pay-for-performance schemes link financial rewards and penalties to the quality and efficiency of care provided. APMs such as episode-based (bundled) payments and accountable care organizations hold health care providers accountable for both the quality and cost of the care they deliver. In this report both types of strategies are referred to broadly as *value-based payment*.

A growing body of research has demonstrated that social risk factors (defined in the committee's first report as socioeconomic position; race/ethnicity and cultural context; gender; social relationships; and residential and community context) as well as health literacy may influence health outcomes as much as—or more than—medical care does (Deaton, 2016; McGinnis, 2016; NASEM, 2016a; Woolf and Purnell, 2016). These findings are a concern for policymakers and health care providers because Medicare beneficiaries with social risk factors for poor health care outcomes are disproportionately concentrated among a subset of health care providers (Bach et al., 2004; Jha et al., 2007, 2008). Clustering of socially at-risk patients is often found in a small subset of providers (e.g., safety-net hospitals, critical access hospitals, minority-serving institutions, community health centers) (NASEM, 2016b). Note, the term *provider* in this report refers to the reporting unit (or, provider setting) being evaluated—e.g., hospitals, health plans, provider groups, etc.

A wide range of stakeholders has raised concerns that current Medicare quality measures and payment programs that financially reward or penalize providers based on the health care outcomes of their patients and do not account for social risk factors may underestimate the quality of care for such providers. Patients with social risk factors may require more resources and more intensive care to achieve certain health outcomes compared to the resources and care needed to achieve those same outcomes in more advantaged patients (NASEM, 2016b). At the same time, because these providers are also more likely to care for patients who are uninsured or covered by Medicaid, they have historically been less well funded than providers caring for larger proportions of patients with commercial insurance that pay more generously for care. If providers disproportionately serving vulnerable populations are likely to have fewer resources to

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begin with and care for patients who require more resources to achieve the same health care outcomes, these providers may be more likely to fare poorly on quality rankings (Chien et al., 2007; Joynt and Rosenthal, 2012; Ryan, 2013). Indeed, evidence suggests hospitals disproportionately serving socially at-risk populations (safety-net, minority-serving, and critical access hospitals) perform worse on average on performance indicators used in VBP compared to hospitals serving the general population (NASEM, 2016b). However, there is also evidence of substantial variation among these providers such that some achieve performance on par with top performers among all hospitals (NASEM, 2016b). Additionally, evidence among ambulatory care providers disproportionately serving socially at-risk population is more mixed, with many performing as well as or better than their providers serving the general population (NASEM, 2016b).

The poorer average performance among providers disproportionately serving socially at-risk populations combined with the fact that they have fewer resources has raised concerns that Medicare's VBP programs may potentially increase disparities. For one, the disproportionate penalties among providers disproportionately serving socially at-risk populations can be perceived as penalizing providers for caring for socially at-risk populations and may reduce incentives to keep doing so. Additionally, if these providers are more likely to have lower average performance, they may also be less likely to receive rewards and more likely to be penalized under VBP schemes compared to providers serving the general population. In this way, VBP programs may be taking resources from the very organizations who need them most (Chien et al., 2007; Ryan, 2013). In so doing, quality in these providers may worsen (Greal, 2014; Ryan, 2013) and the organizations could also fail, further reducing access to care for socially at-risk patients (Lipstein and Dunagan, 2014).

Proposals to improve VBP programs to address these unintended consequences on health disparities recommend accounting for differences in patient social risk factors when measuring quality and calculating payment, also referred to as risk adjustment or payment adjustment. As defined in the committee's first report and discussed in more detail in Chapter 4 of this report, although the committee conceives of risk adjustment and payment adjustment as two separate methods, risk adjustment can become a method of payment adjustment when risk adjusted measures are used as the basis of payment. This proposal extends the rationale for adjusting for differences in clinical risk factors across providers to ensure accurate measurement and fair comparisons by taking into account differences that are beyond the control of individual providers (currently performed for all Medicare quality measures and payment programs) to also include social risk factors that may be beyond the control of providers (Girotti et al., 2014; Jha and Zaslavsky, 2014; Joynt and Jha, 2013; Pollack, 2013; Renacci, 2014).

Critics of such accounting are concerned that some forms of adjusting payments or quality measures for social risk factors may reduce incentives for providers who care for disadvantaged patients to improve the quality of care they provide to these patients (Bernheim, 2014; Kertesz, 2014). Critics of accounting for social risk factors also argue that adjusting measures would obscure health disparities, making it more difficult to hold providers accountable for lower-quality care and would also accept and potentially institutionalize a lower standard of care for socially at-risk populations (Bernheim, 2014; Jha and Zaslavsky, 2014; Kertesz, 2014; Krumholz and Bernheim, 2014; O'Kane, 2015). If the goal of value-based payment models is to improve quality and control costs while simultaneously enhancing health care equity and improving outcomes for disadvantaged patients, careful attention must be paid to



the delicate balance between adjusting payments and quality measures and preserving incentives to improve the care these patients receive.

These concerns draw attention to possible harms that may be introduced after accounting for social risk factors that would not otherwise exist. However, new harms that may arise from accounting for social risk factors are best considered in relation to the possible advantages and disadvantages that already exist under the status quo. Evaluating the benefits and disadvantages of accounting for social risk factors thus requires evaluating the likely effect of new methodologies on existing disparities in quality and access to care, to understand whether accounting methods are likely to exacerbate or diminish these disparities.

## STATEMENT OF TASK

In response to concerns about health equity and accuracy in reporting and to the Improving Medicare Post-Acute Care Transformation (IMPACT) Act approved by Congress in 2014, the Department of Health and Human Services acting through the Office of the Assistant Secretary for Planning and Evaluation (ASPE) contracted with the National Academies of Sciences, Engineering, and Medicine to convene an ad hoc committee to identify criteria for selecting social risk factors, specific social risk factors Medicare could use, and methods of accounting for those factors in Medicare quality measurement and payment applications. The committee comprises expertise in health care quality, clinical medicine, health services research, health disparities, social determinants of health, risk adjustment, and Medicare programs (see Appendix B for biographical sketches). This report is the third in a series of five brief reports that aim to inform ASPE analyses that account for social risk factors in Medicare payment programs mandated through the IMPACT Act. In the first report, the committee presented a conceptual framework and described the results of a literature search linking five social risk factors and health literacy to health-related measures of importance to Medicare quality measurement and payment programs. In the second report, the committee reviewed the performance of providers disproportionately serving socially at-risk populations, discussed drivers of variations in performance, and identified six community-informed and patient-centered systems practices that show promise to improve care for socially at-risk populations. Details of the statement of task and the sequence of reports can be found in Box 1-1. The committee will release reports every three months, addressing each item in the statement of task in turn. The statement of task requests committee recommendations only in the fourth report.

### BOX 1-1 Statement of Task

An ad hoc committee will provide a definition of socioeconomic status (SES) for the purposes of application to Medicare quality measurement and payment programs; to identify the social factors that have been shown to impact health outcomes of Medicare beneficiaries; and to specify criteria that could be used in determining which social factors should be accounted for in Medicare quality measurement and payment programs. Furthermore, the committee will identify methods that could be used in the application of these social factors to quality measurement and/or payment methodologies. Finally, the committee will recommend existing or new sources of data and/or strategies for data collection. The committee's work will be conducted in phases



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and produce five brief reports, which build upon the Institute of Medicine of the National Academies of Sciences, Engineering, and Medicine's previous studies relevant to this study.

The first report will:

- Define socioeconomic status for the purpose of application to quality, resource use, or other measures used for Medicare payment programs.
- Identify SES factors and other social factors (such as race, health literacy, limited English proficiency) that have been shown to impact health outcomes of Medicare beneficiaries.

The second report will:

- Identify best practices of high-performing hospitals, health plans, and other providers that serve disproportionately higher shares of socioeconomically disadvantaged populations and compare those best practices to practices of low-performing providers serving similar patient populations.

The third report will:

- Specify criteria (along with their strengths and weaknesses) that could potentially be used to determine whether an SES factor or other social factor should be accounted for in Medicare quality, resource use, or other measures used in Medicare payment programs.
- Identify SES factors or other social factors that could be incorporated into quality, resource use, or other measures used in Medicare payment programs.
- Identify methods that could be used in the application of SES factors and other social factors to quality, resource use, or other measures used in Medicare payment programs.

The fourth report will:

- For each of the SES factors or other social factors described above, recommend existing or new sources of data on these factors and/or strategies for data collection, while also identifying challenges to obtaining appropriate data and strategies for overcoming these challenges.

In the fifth report:

- The committee will synthesize and interpret the 4 brief reports issued as described above into one report that will include comprehensive project findings, conclusion, and recommendations based on the 4 previous reports.

# COMMITTEE PROCESS

In their first report, the committee laid out a conceptual framework that captures the relationships among social risk factors and health literacy and health care-related outcomes and other performance measures. This report builds on the conceptual relationships and empirical associations between social risk factors and health literacy and quality measures and health care outcomes identified in the first report to provide guidance on which factors could be considered for Medicare accounting purposes, criteria to identify these factors, and methods to do so in ways that can improve care and promote greater health equity for socially at-risk patients. To that end,

the committee also aims to address issues that must be carefully considered to maintain or enhance incentives for providers to improve care for socially at-risk patients throughout the report while also promoting accuracy in reporting and compensating providers fairly. The committee's goals in accounting for social risk factors in Medicare payment programs are:

1. Reducing disparities in access, quality, and outcomes;
2. Quality improvement and efficient care delivery for all patients;
3. Fair and accurate public reporting; and
4. Compensating providers fairly.

To achieve these goals, accounting for social risk factors should neither mask low-quality care or health disparities nor reward poor performance. Additionally, inclusion of social risk factors in quality measurement and payment should not disincentivize providers from finding strategies to overcome the influence of social risk factors on health care outcomes.

In Chapter 2, the committee identifies criteria for selecting social risk factors that could be incorporated into Medicare quality measurement and payment programs along with the rationale for and potential challenges of each criterion. In Chapter 3, the committee applies the criteria identified in Chapter 2 to the social risk factors and their respective indicators identified in the committee's first report. The committee also identifies the rationale for including these factors and indicators based on the criteria, as well as their limitations relative to those criteria. Chapter 4 presents an overview of current and planned Medicare VBP programs and how they currently account for social risk factors (if at all) and describes alternative methods of accounting for social risk factors in these programs.

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## 2

## Criteria for Selecting Social Risk Factors for Application in Medicare Quality Measurement and Payment

### **RATIONALE FOR ACCOUNTING FOR SOCIAL RISK FACTORS IN QUALITY MEASUREMENT AND PAYMENT**

Performance measurement and public reporting are critical building blocks for quality improvement and attainment of a high-performing health system. Public reporting provides information to payers, administrators, and regulators to help identify which providers offer high-quality care and which require improvement—or worse, merit sanctions (IOM, 2006). By enabling comparisons of provider performance, public reporting can also incentivize quality improvement and inform consumer decision making (IOM, 2006). As Medicare and the U.S. health care system at large shift their focus from providing individual treatments to providing preventive care and improving population health, payment systems have correspondingly reflected a shift from paying for the provision of services (fee-for-service or volume-based payment) to paying for the production of good health care outcomes (value-based payment, or VBP) (McGinnis, 2016). These VBP models tie payment to performance, which shifts greater financial risk to providers, thereby raising the stakes of performance measurement and public reporting.

Underlying the assumption that both public reporting and VBP will motivate improvement is the reasoning that performance measurement and comparisons of provider performance will help identify the drivers of variation, which will in turn inform how subpar performance can be improved. At the same time, meaningful comparisons aim to reflect provider performance with all else equal by minimizing the effect of other factors such as patient characteristics that may affect health care quality or outcomes independently of provider influence (Ash et al., 2013). In epidemiology, these other factors are considered confounders.

A confounder is a third variable that is associated with both an exposure (independent variable) and the outcome of interest (dependent variable), but does not mediate the effect of the exposure on the outcome (the confounder is not in the causal pathway). In performance measurement, the exposure is the reporting unit's (e.g., hospital, health plan) performance and the outcome is the measure of health care use, health care outcomes, or resource use. The committee embraced measures from these domains in its expanded definition of "health outcomes" in its first report. Health care use captures measures of health care utilization and

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clinical processes of care; health care outcomes include health outcomes, but also measures of patient safety and patient experiences of care; and resource use captures cost measures. In this report, the committee groups these domains and measures into the overarching category of *performance indicators used in VBP*.

If confounders are unevenly distributed across comparison groups, this can lead to bias (systematic error) in performance measurement, which in turn leads to a distortion of the true association between the exposure and outcome (Aschengrau and Seage, 2008). In experimental studies (such as a randomized controlled trial), researchers can minimize the effect of confounders by randomizing known (and unknown) confounders across treatment groups to ensure the groups are comparable. However, in the real world (and thus observational data), confounders are typically unevenly distributed across groups. To minimize this bias, those assessing provider performances can identify specific factors as confounders and account for them statistically in an effort to more accurately measure the true association. When comparing health system performance, the principal method to account for differences in patient characteristics in quality and outcomes measurement is risk adjustment (also known as case-mix adjustment), although it is only one of several potential methods. (Methods are discussed in Chapter 4.)

Clinical risk factors are patient characteristics that may influence performance indicators used in VBP and may also be unevenly distributed across providers. For this reason, quality measures and payment models currently account for underlying and systematic differences in clinical risk factors known to independently drive variation in performance (NASEM, 2016a). For example, one health plan may have sicker patients than another health plan. Risk adjustment for clinical risk factors accounts for this selection (Kunkel and Powell, 1981; Pope et al., 2004). Accounting for social risk factors extends the rationale of accounting for clinical risk factors to also include social risk factors as characteristics that may impede accurate comparisons across health care providers. To the extent that social risk factors influence performance indicators used in VBP independently of provider actions and these social risk factors are unevenly distributed across providers, when providers are held accountable for their performance on these measures, accounting for underlying differences in social risk factors may be appropriate. Importantly, identifying a third variable as a confounder is primarily a conceptual exercise that can be supported by empirical data. However, a third variable can also have other conceptual relationships between an exposure and an outcome (for example, mediation and moderation). When factors have other relationships with an outcome of interest, it may be desirable to account for the factor in a different way or not account for the factor at all.

## GUIDING PRINCIPLES

The committee developed selection criteria for social risk factors to support the methods for accounting for social risk factors in Medicare payment, particularly payment tied to performance indicators. Underlying the committee's approach to accounting for social risk factors is a commitment to achieving health equity. Health equity is an ethical value that broadly refers to the elimination of unfair inequalities in health status by power, wealth, or prestige that may exist across social groupings by virtue of factors such as race, income, or sex (Braveman and Gruskin, 2003). When applied to *health care*, equity represents the commitment of providers, health systems, or payers to achieving a universally high standard of health care quality for all patients. To the greatest extent possible, a commitment to equity requires the



elimination of disparate outcomes that arise across otherwise similar patients because of their social risk factors. However, complete equality of outcomes may not be attainable within a health system because some of the factors contributing to disparities are not modifiable by providers, health systems, or payers. Additionally, achieving health equity requires more than equitable health care, or providing the same type and quality of health care to all patients regardless of social risk, because this may not be sufficient to reduce health disparities. Some subpopulations (such as those with greater levels of social risk factors) may require more intensive care to achieve the same health outcomes that can be achieved in the general population with less intensive care and at lower cost. A system of accounting for social risk factors in VBP achieves the ethical goal of equity when it appropriately recognizes the challenges of caring for populations with social risk factors, while creating incentives that are likely to lead to the improvement of care for socially at-risk patients.

The translation of this ideal into policies to account for social risk factors is complex for both philosophical and practical reasons. Philosophically, the concept of health equity is open to multiple possible interpretations, with different implications for resource distribution and measurement (Culyer, 2007). For example, achieving a fair distribution of resources across populations with different social risk factors is likely to require balancing resources across subgroups defined by level of disease burden, socioeconomic status, race, and other social risk factors. Establishing an equitable allocation of resources in these cases requires policy makers to define reasonable trade-offs between worthwhile societal goals, such as eliminating health disparities and improving overall health. Relatedly, there are significant trade-offs between health equity, efficiency, and other values.

The committee does not take a position on how to resolve the complex trade-offs inherent in promoting health equity, a task that exceeds the scope of this report. However, it is assumed that some conception of equity is always guiding choices of different methods for accounting for social risk factors, as well as the choices of measures used to represent health care quality and equity. Accordingly, it is important that any selection of methods to account for social risk factors be justified relative to a particular conception of equity, and trade-offs in resource allocation that arise from different alternative conceptions of equity be made transparent by policy makers and subjected to ethical deliberation among affected stakeholders.

Even after adopting a conception of equity to account for social risk factors, there is a tension around the best way to get there, because, as described above, equity is open to multiple possible interpretations. As described in Chapter 1 and in the committee's first report, critics of accounting for social risk factors in VBP programs are concerned about the potential to institutionalize a poorer standard of care and to reduce incentives to improve care for socially at-risk populations. Proponents are concerned about incentives for providers to avoid socially at-risk populations, further reducing already limited resources among providers disproportionately serving socially at-risk populations, and, consequently, increasing health disparities. Such differences may arise from differential weight these opposing views place on the potential harms of accounting for social risk factors in VBP and the harms of not accounting for social risk factors (i.e. the status quo). (Potential harms of the status quo compared to accounting for social risk factors are discussed in Chapter 4.)

Underlying these arguments is a fundamental disagreement about the interpretation of observed differences as well as the ability of providers to address social risk factors that may influence observed differences in performance. As described in the committee's second report, the lower average performance among providers disproportionately serving socially at-risk



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populations and the poorer health and health care outcomes among socially at-risk populations is likely neither wholly attributable to factors out of the control of providers nor wholly the result of poorer care on the part of providers (NASEM, 2016b). On the one hand, some opponents believe that because observed differences in performance indicators used in VBP could reflect actual differences in health care quality as well as the influence of social risk factors, given that it is not possible to determine whether or to what extent the poorer performance is due to real differences, risk adjustment could obscure real disparities and thereby reduce incentives to improve care and reduce health disparities. Proponents might counter that if the difference in outcomes affecting the disadvantaged groups is found consistently across the health care system, then providers treating more patients from those groups should not bear the entire penalty for those disparities. Opponents might argue that these providers should be held responsible for providing services in a manner that compensates for social risk factors, while proponents might view social risk factors as less easily addressed through provider actions compared to opponents. They may also believe the costs of addressing social risk factors to be high and thus must be accounted for in the payment system even if it is appropriate to expect providers to address social risk factors.

The primary goal of the criteria is, therefore, to guide selection of social risk factors that could be accounted for in VBP so providers or health plans are rewarded for delivering quality and value independent of whether they serve patients with relatively low or high levels of social risk factors. As described in the previous section, VBP aims to incentivize quality improvement for all patients by tying payment to performance. Under VBP, providers who care for patients who would score lower on the measures of performance as a result of factors outside of the providers' control (such as certain social risk factors), rather than as a result of the quality of care delivered, should not be penalized because of the influence of these non-modifiable factors. The measures should reflect quality; the effect of other factors, such as patient characteristics, should be minimized. In sum, the criteria should guide identification of social risk factors that could be accounted for in performance indicators used in VBP to promote accuracy in reporting.

## COMMITTEE PROCESS

The criteria put forth by this committee adhere closely to the guidelines for selecting risk factors developed by the National Quality Forum (NQF) in their 2014 report *Risk Adjustment for Socioeconomic Status or Other Sociodemographic Factors*. However, the committee made several changes to reflect their priorities. Like NQF, the committee's criteria explicitly focuses on selecting risk factors that will be applied to adjustment of measures used for VBP. However, as will be discussed in detail in Chapter 4, there are multiple methods to account for social risk factors in VBP, including some models that adjust payment directly. The committee's criteria reflect the need for selected social risk factors to apply to this broader range of methods.

The NQF guidelines drew on guidelines previously developed for the Centers for Medicare & Medicaid Services (CMS) hierarchical condition categories (HCCs) risk adjustment model (Pope et al., 2004), which the committee also reviewed. Whereas the NQF guidelines and the committee's criteria reflect the increased need to account for social risk in addition to clinical risk as Medicare moves towards a payment model tied to performance, prevention, and population health (Burwell, 2015), the CMS-HCC model aims to predict medical expenditure risk. In developing the criteria, the committee also reviewed criteria developed to guide whether to include a specific HCC in the Department of Health and Human Services (HHS) HCC risk

adjustment model for individual and small group markets (Kautter et al., 2014) as well as criteria to identify case-mix adjusters for the Consumer Assessment of Health Care Providers and Systems (CAHPS) surveys case-mix adjustment model (Elliott et al., 2009; O'Malley et al., 2005). The criteria the committee reviewed and drew upon in developing their criteria are listed in Appendix A.

## CRITERIA FOR SELECTING SOCIAL RISK FACTORS

*Conclusion 1: Three over-arching considerations encompassing five criteria could be used to determine whether a social risk factor should be accounted for in performance indicators used in Medicare value-based payment programs. They are:*

- A. *The social risk factor is related to the outcome.*
  1. *The social risk factor has a conceptual relationship with the outcome of interest.*
  2. *The social risk factor has an empirical association with the outcome of interest.*
- B. *The social risk factor precedes care delivery and is not a consequence of the quality of care.*
  3. *The social risk factor is present at the start of care.*
  4. *The social risk factor is not modifiable through provider actions.*
- C. *The social risk factor is not something the provider can manipulate.*
  5. *The social risk factor is resistant to manipulation or gaming.*

These criteria along with their rationale, potential limitations, and practical considerations for applying the criteria are described in detail in the subsequent sections.

### Criteria Category A: The Social Risk Factor Is Related to the Outcome

This category is the most basic pair of criteria for a social risk factor—that there be both a plausible and valid reason why the risk factor would be associated with the outcome and empirical evidence that such a relationship holds in practice. Together these criteria lay the foundation for the validity and practical importance of the risk factor.

#### *Criterion 1: Conceptual Relationship with the Outcome of Interest*

A conceptual relationship between the social risk factor and the outcome of interest (i.e., performance indicators used in VBP) ensures there is a reasonable link that might explain an association between the factor and the outcome. Conceptual relationships can be direct or indirect; a risk factor may also be a marker or proxy for otherwise unmeasured factors. To meet this criterion, the conceptual relationship may follow any of these pathways—the factor may be in a direct causal pathway, mediate the causal pathway, or be associated with an otherwise unmeasured confounder. In other words, while this criterion requires some conceptual relationship, it does not require a well-established, direct, causal relationship.

Establishing a unique causal effect can be difficult. In particular, identifying causal mechanisms can be challenging when risk factors operate through multiple pathways, as many social risk factors do (NASEM, 2016a). The main rationale for including social risk factors for which the precise causal mechanism is not well established is the fundamental cause theory (Link and Phelan, 1995). From this perspective, the causal mechanisms are expected to change over time, but the effect of fundamental causes like social risk factors on health outcomes are expected to persist. For example, it is well established that race and ethnicity may influence health. (See the committee's first report [NASEM, 2016a] or Chapter 3 for a more thorough discussion.) However, the precise mechanism by which race and ethnicity affect a given health care outcome in a particular setting may be less well established and may change over time. When the aim is prediction and accounting for differences in underlying risk between providers, rather than explanation, how a social risk factor like race/ethnicity affects health, is less important than that factor's predictive power (i.e., the strength of the relationship between race/ethnicity and the outcome of interest) (Elliott et al., 2009; O'Malley et al., 2005). Thus, an association between a social risk factor and outcome that persisted despite changes in the underlying causal mechanism would meet this criterion. Note that, because the goal is not to identify causes of poor quality, but rather to allow providers to see their performance with and without the influence of social risk factors, the existence of a conceptual relationship does not necessarily imply that outcomes would improve through interventions targeted at social risk factors or at ameliorating the effects of social risk factors.

Establishing the conceptual relationship to meet this criterion can be informed by the academic literature such as theories from the epidemiologic or social sciences literature, or by clinical expertise. For example, Link and Phelan use their fundamental cause theory to establish a relationship between race and health outcomes, while Epstein and colleagues used clinical criteria to establish an association between race and renal transplant utilization (Epstein et al., 2000; Phelan and Link, 2015). If the only conceptual rationale is that the social risk factor is correlated with an otherwise unmeasured factor, it would be preferable to have a direct measure for that factor. However, if the unmeasured factors cannot be measured, then, while not ideal, it may be justifiable to include the confounded factor as a proxy. Establishing a conceptual relationship takes into account several practical considerations.

One consideration is that some factors that are conceptually related to the outcome might nonetheless be unacceptable for inclusion in risk adjustment or alternative methods because of concerns regarding face validity or acceptability. For example, if people who profess a particular religious affiliation had systematically lower-quality scores, it might be unacceptable for a hospital's payment to be in any way influenced by its patients' religious affiliations. Similarly, it would be problematic if all the social risk factors included in a model were selected because of social norms or political considerations rather than an established conceptual relationship. Another practical issue would be to consider whether and how the construct works in a population of interest. This may be particularly relevant when identifying the appropriate indicator and measure used to assess a given social risk factor. For example, current occupation would not be a good indicator of SEP among beneficiaries who qualify for Medicare based on disability, because not working is an eligibility requirement.

### *Criterion 2: Empirical Association with the Outcome of Interest*

An empirical relationship means that there is a statistical association of a meaningful magnitude between the social risk factor and the set of outcomes of interest (i.e., performance

indicators used in VBP) that is unlikely to be caused by chance. Empirical support for a conceptual relationship between a social risk factor and an outcome can come in part from the literature.

A common method to identify an empirical relationship is to assess the association or correlation between the two variables. For example, mortality is higher for those with lower income. The correlation in this example is known as a bivariate relationship, as it refers to the association of two variables (mortality and income). The committee considers a bivariate relationship the minimum standard necessary to meet this criterion. A multivariate association is one that considers more than two variables at a time. For example, in a bivariate association, low-income older adults have higher Medicare expenditures than high-income older adults. However, low income is also associated with health status. Specifically, low-income older adults are sicker than high-income older adults. Thus, if the third variable of health status is added to create a multivariate model, after the association between income and expenditures is adjusted for underlying differences in health status, low-income older adults may have expenditures that do not differ from higher-income older adults. As seen in this example, assessment of the empirical relationship using the bivariate relationship can lead to a different conclusion than assessment in a multivariate context. In general, evidence of multivariate associations may be considered stronger evidence of an empirical association as multivariate evidence is closer to establishing a unique association between the social risk factor under consideration and the outcome. Such multivariate evidence also rules out the possibility that the additional variables in the model completely explain the bivariate association.

This discussion raises one of several practical considerations for implementation that are specific to the setting under consideration. First, when relying on the literature to establish an empirical relationship, the setting of the empirical association in the literature may not be generalizable to the particular setting to which it is being applied with respect to VBP. Relatedly, evidence of bivariate or multivariate associations of a social risk factor with an outcome is more compelling and relevant if it has been established within different reporting units within the setting in question (Elliott et al., 2001; Jha and Zaslavsky, 2014; Zaslavsky et al., 2001). For example, one might consider education as a social risk factor for flu immunization in Medicare health plans. Suppose that flu immunization is lower overall for those with less education. If no such association exists after controlling for the health plan in which a Medicare beneficiary is enrolled, then there is no within-plan association—the initial overall association would be entirely “between-plans.” In this scenario, the observed association between education and immunization rates reflects only differences in immunization rates between plans that differ in their members’ education. In other words, the observed association between education and immunization may be capturing the unmeasured influence of a provider (health plan) characteristic linked to overall quality as a proxy and may reflect an ecological fallacy (incorrectly drawing inferences about individuals within a group from inferences about the group to which those individuals belong). Therefore, the between-plan association provides only weak evidence of the effect of education itself on immunization rates.

If, however, beneficiaries with lower education were less likely to receive flu immunizations than beneficiaries with more education in the same health plans, this would be evidence of a within-plan association of education and flu immunization. Here, the observed association between education and immunization rates reflects differences in patient characteristics rather than health plan characteristics. Thus, this within-plan association supports the hypothesis that the health plans achieve worse outcomes with patients with low education

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compared to patients with high education on average. Given that this criterion is meant to confirm the hypothesized conceptual relationship, this within-plan association therefore provides stronger evidence of the hypothesized relationship between patient education and flu immunization than only an overall or between-plan association in the context of health plans.

This raises a related consideration. A particular multivariate model in the literature may reduce the association of interest due to a variable that might not be included in the model being built for Medicare payment adjustment. Thus, it may be important to statistically assess the empirical association of a specific social risk factor within the particular multivariate setting in which it is being applied. In particular, social risk factors should contribute unique variation in the outcome of interest. Social risk factors will not affect scores or payment unless they both (a) vary across units, and (b) predict performance indicators used in VBP within reporting units after considering other retained social risk factors. For example, gender might not vary much across health plans (situation a), whereas one measure of socioeconomic position (SEP) might not predict any performance measures strongly if another measure of SEP strongly correlated with it were already included (situation b). Thus, some social risk factors might be “redundant” for some or all performance measures in a given setting at a given time. To the extent that the goal is prediction/adjustment rather than explanation/causal inference, which the committee believes to be the case (as described in the first criterion regarding establishment of a conceptual relationship), prediction/adjustment is not harmed by the inclusion of redundant social risk factors. To the extent that the data collection of a particular risk factor is costly or burdensome to collect, the government may choose not to measure a risk factor that appears to explain little of the variation in relevant outcomes, but this criterion should be applied weakly and should not be used to exclude social risk factors that are important to some performance measures. Moreover, if a disparity associated with a social risk factor has been eliminated, consideration should be given to continuing to include the factor to preserve incentives, in addition to monitoring disparities associated with the social risk factor.

Finally, when applying this criterion, it will be important to consider whether accurate data on the social risk factor is feasible to collect and use. This consideration should take into account privacy laws (such as those relating to the Health Insurance Portability and Accountability Act of 1996, also known as HIPAA) and privacy concerns regarding data collection, use, and disclosure (IOM, 2014). This may be especially relevant when accounting for social risk factors, because social risk factors touch upon numerous sensitive issues and because individual-level data is needed to identify within-plan differences (IOM, 2014). This consideration should also take into account data that is both currently available and used, available but underutilized data, as well as future sources of data. It is important to note that current literature can only provide evidence of descriptive (i.e., observed) relationships. It should be noted that these descriptive relationships do not represent necessary relationships, and as noted, these relationships may change over time.

It is critical to consider whether the data exist in data sources that are underused. For example, electronic health records (EHRs) collect substantial amounts of data about individuals that are not used in performance measurement for VBP. Additionally, CMS already conducts data collection through CAHPS surveys that could be applied to other outcomes at an aggregated level. For example, Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) collects data on a sample of patients at a given hospital, and thus could be a source of hospital-level data that could be used to account for differing populations with different levels of social risk factors. The valid use of this approach may currently be very limited, as it cannot



be used to establish within-hospital associations or to develop within-hospital adjustments. However, in future, if HCAHPS data could be linked to other patient data and there remains sufficient sample size at the intersection of these data sets, it might be possible to use this data to account for social risk factors.

With respect to future sources of data, collecting accurate data is important and should be balanced against data burden and feasibility. Other considerations include whether the missing data elements regarding social risk factors may be issues that are more subjective and therefore potentially subject to manipulation. Additionally, providers may have the ability to gather information on risk factors, but the desire to collect data providers report should be balanced against the need for objective sources of data. Data sources are the topic of the committee's next and fourth report.

### **Criteria Category B: The Social Risk Factor Precedes Care Delivery and Is Not a Consequence of the Quality of Care**

Factors that reflect a model of care delivery (e.g., nurse staffing levels in a hospital), a treatment decision, or the direct consequences of care or treatment decision are not appropriate adjusters, as they reflect true differences in quality of care or other outcomes. In addition, adjusting for some modifiable risk factors may discourage some means of quality improvement and disparity reduction. To achieve goals of VBP as stated above, it is critical to consider whether risk factors are the consequence of provider efforts. If a factor can be influenced by the provider, then accounting for it may diminish incentives to improve that risk factor. For example, if health literacy improves health care outcomes and can be improved by providers or health plans, using the level of health literacy in risk adjustment would diminish incentives to do so. At the same time, it may still be appropriate to account for health literacy in other ways if improving health literacy or if aligning the demands of the health system to patients' skills and abilities to facilitate their access, understanding, and use of health information and services is costly and/or low-literacy patients require more resources (e.g., the use of navigators) to achieve the same health care outcomes.

#### *Criterion 3: Risk Factor Is Present at the Start of Care*

While not a guarantee of avoiding selection of social risk factors that are a consequence of the care provided, identifying factors that are present at the start of care are unlikely to be affected by the care they are about to receive. Note that for some criteria, it is possible to have reasonable confidence that a factor was present at the start of care even if measured later—such as educational attainment for Medicare beneficiaries. This criterion may be inadequate for highlighting some risk factors that are the consequence of care in the context of repeated use of the same provider or arrangements that hold providers accountable for population health. In these contexts, the “start of care” may also be the “end of care” one period earlier.

Often the timing of a risk factor must be carefully considered in a particular application. If one adjusts for a factor as it was present at the start of care, one is accounting for its influence on or associations with outcomes for the duration of a particular hospitalization, a particular year of outpatient care from a plan, or some other limited period. One would have to acknowledge that if a patient sees the same provider for many years, such an adjustment does not control for any effects that provider had on the factor before the start of the episode of care in question. For this reason, it may be helpful to prioritize slowly-changing factors over rapidly-changing factors.



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This may be particularly challenging when a risk factor can change quickly in response to the circumstance under consideration. For example, marital status and living alone are indicators of social support. Both indicators can change quickly, especially in older persons. For example, if a husband and wife live together and the husband dies, the woman would suddenly be widowed and living alone. In that case, the measured risk factor could change. Social risk factors that are subject to rapid change may be more likely to be a consequence of the care provided. Similarly, it is important to consider whether a factor represents a cumulative life cycle effect or a transient effect. For example, poverty has a cumulative effect over a lifetime, whereas transportation unavailability might be transient.

*Criterion 4: Risk Factor Is Not Modifiable Through Provider Actions*

To avoid selecting factors that are the consequence of the quality of care, in addition to avoiding factors that are not present at the start of care, it is important to critically assess whether that factor is something that a provider can modify either directly or indirectly. Although such factors are often highly correlated with outcomes, accounting for such factors contravenes the goal to account for factors that are either largely beyond a provider's control or only modifiable at great expense and with great difficulty. The absence of air conditioning in the patient's home, for example, could be an indicator of a patient's environmental context as a social risk factor for poor outcomes that can be present at the start of care. At the same time, if purchasing air conditioners for their high-risk patients were somehow to become an indicator of high-quality care, absence of air conditioning could be a characteristic of the care provided. If air conditioning were then to be adjusted for in quality measurement, providers with more patients without air conditioning would receive a higher payment. At the same time, providers that purchased air conditioners for their high risk patients to improve quality would not fully benefit in terms of VBP because, although outcomes may improve, these providers would also have lower risks and thus risk adjustment would lower their payment. Applying this criterion together with the preceding one (the risk factor is present at the start of care) could help avoid the challenge of identifying factors that may be present at the start of care, but can also be a characteristic of the care provided.

It is important to distinguish between factors that can themselves be modified or influenced and those that are unmodifiable themselves, but can be addressed by appropriately tailored approaches that improve outcomes without changing the underlying disadvantage. Unmodifiable factors include race and ethnicity, nativity, and gender. Although themselves unmodifiable, these factors and indeed all efforts at disparity reduction and quality improvement for socially at-risk patients are predicated on the assumption that tailored, appropriate care for those with any particular risk factors is possible. Other factors, like income, wealth, occupation, language, housing, and transportation are potentially modifiable, but doing so likely requires substantial effort and cost. Health care providers can advocate for the inclusion of health in all policies to address underlying social conditions as root causes of health care outcomes, but the responsibility to improve transportation and education systems, reduce poverty, teach English, and ensure a living wage and sufficient affordable housing stock lies outside of the health care system. At the same time, the committee acknowledges that health care providers are increasingly held responsible for addressing social risk factors by, for example, partnering with social service agencies, public health agencies, and community-based organizations. Examples of these interventions are described in detail in the committee's second report (NASEM, 2016b). Although such interventions mitigate the effects of social risk factors on certain health care

outcomes, they do not change the underlying social conditions. Both unmodifiable factors and factors that are potentially modifiable but beyond the purview of the health care system would meet this criterion. Methods of adjusting or otherwise accounting for social risk factors, as described in Chapter 4, can account for unmodifiable risk factors while rewarding providers who provide better, appropriate, tailored care that minimize the impact of social risk factors on certain health care outcomes.

The critical challenge of applying this criterion is that it can be difficult to identify the extent to which care provision might affect a particular risk factor in practice. While it is fairly easy to determine whether a risk factor is present at the start of care, a great deal of judgment may come into play when deciding whether a risk factor could be altered by higher-quality care particularly as care providers become responsible for population health and may engage in interventions that are not contained within the provider's health care setting.

### **Criteria Category C: The Social Risk Factor Is Not Something That the Provider Can Manipulate**

#### *Criterion 5: The Risk Factor Is Resistant to Manipulation or Gaming*

Gaming is unproductive behavior by the agent being evaluated (e.g., the provider) that distorts measurement to improve the agent's performance measure score (better measured care or outcomes) without a corresponding improvement in the intended care or outcome for which the performance measure is capturing (better actual care or outcomes) (Bevan and Hood, 2006). In this case, the focus is not on gaming a performance measure but rather on gaming a measure of a social risk factor that will in some way change the interpretation of the performance measure inappropriately. Gaming the measure of a social risk factor results in obscuring rather than clarifying true performance.

The rationale for this criterion is to protect against including social risk factors that might create perverse incentives for providers to engage in unproductive behavior or deliver suboptimal care for the purpose of the payment system rather than for the purpose of quality of care. Such a perverse incentive might include the possibility that a target could be achieved by reducing the quality of care for patients with low social risk rather than improving the quality of care for socially at-risk patients and overall. Any provider or health plan should be expected to maximize payment within legal limits (McGuire, 2000). This has been documented extensively in terms of coding patient diagnoses more completely in order to ensure higher payments (Dafny, 2003; Kronick and Welch, 2014). Selecting the most advantageous patients within any given group has been documented as well (Newhouse et al., 2012). Note that this criterion to address potential gaming is not an ethical judgment about health care providers. Rather, these providers operate within systems in which quality improvement and disparities reduction goals are not aligned with the payment system. Consequently, these systems may not optimally allocate resources to improve quality and reduce health disparities and may therefore embed perverse incentives for providers.

Gaming the measurement of social risk factors may be less likely if measures are externally collected and reported. Gaming may be more likely if measures used for accounting purposes were based on provider reporting. For example, if hospitals reported patients who were referred to receive meal delivery as a measure of food insecurity and indicator of financial stress, hospitals might "over-refer" patients who do not need this type of support. Additionally, if the

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indicator (or measure) were based on a sample of patients, the sample could be taken in a way that was not representative of the provider's entire pool of patients.

Gaming can be practically addressed in several ways. First, continuous measures are preferable to discrete ones because there are no large gains from threshold level changes. For example, if adjustment only accounted for the population below 100 percent of the federal poverty level (FPL), then systems might have a lot to gain from capturing income at a particular low point that would increase the number of people falling below 100 percent of FPL than if adjustment were continuous at all levels of income. Second, one could prioritize specific coding over vague coding. In diagnostic criteria, measure developers limited the potential for gaming by giving greater weight, for example, to a diagnosis of cancer that could be verified by a biopsy result in a chart review, than to a symptom report of fatigue. Similarly, more weight was given to an acute myocardial infarction than to a non-specific chest pain diagnosis. These principles can be generalized and applied to social risk factors. For example, one could consider a measure that indicates enrollment in specific nutritional assistance programs that are means-tested rather than using a subjective measure of food insecurity captured at the time of hospital readmission. Third, one could pay particular attention to potentially influential (high-leverage) risk factors. Risk factors that are not prevalent but highly predictive of outcomes can be particularly influential. As such, they may be particularly tempting with regard to gaming if such gaming is possible. Such measures therefore require particular scrutiny with regard to gaming. Nonetheless, such factors may be particularly important if gaming can be avoided, as a failure to account for such factors could greatly disadvantage providers who care for large proportions of patients with high levels of social risk factors.

The committee's criteria along with the rationale and potential challenges of each criterion are summarized in Table 2-1.

**TABLE 2-1** Criteria for Selecting Social Risk Factors for Application in Medicare Quality Measurement and Payment, Rationale, and Potential Challenges

Criteria	Rationale	Challenges/Limitations	Practical Considerations
<b>A. The social risk factor is related to the outcome</b>			
1. Conceptual relationship with the outcome of interest	A conceptual relationship informed by research and experience ensures that there is a reasonable conceptual basis for expecting a systematic relationship.	A conceptual relationship may not be consistent over time or across settings. It is not always possible to distinguish unique causal role of factor so usefulness in an adjustment model does not necessarily imply that outcomes would improve through interventions on risk factor.	Acceptability and face validity: Some factors may be indicated empirically, but would need to be excluded because it has poor face validity or because data would be unacceptable to collect and include.
2. Empirical association with the outcome of interest	An empirical association confirms the conceptual relationship. Without this criterion, an adjustor (social risk factor) may have no effect.	Empirical evidence may not be generalizable to the particular setting. Relationship may not hold in multivariate model.	<p>Data limitations often represent a practical constraint to what factors are included in risk models. The aim is to reliably and feasibly capture accurate data. The challenge is to push for greater reliability and feasibility of factors that may be important to include, even if factors are excluded today, because it is currently infeasible. Privacy laws and concerns about patient confidentiality may also be an issue.</p> <p>Contribution of unique variation in the outcome (i.e., not redundant or highly correlated with another risk factor): Prevent overfitting and unstable estimates, or coefficients that appear to be in the wrong direction; reduce data collection burden.</p>
<b>B. Social risk factor precedes care delivery and is not a consequence of the quality of care</b>			
3. The risk factor is present at the start of care	If a risk factor present at start of care, then it less likely that it would be the result of care provided	Does not eliminate a risk factor being a consequence of care delivery in dynamic settings or under population health settings	Prioritize slowly changing factors over rapidly changing variables: Measurement would have to be more frequent, but rapidly changing variables would not fully disqualify a measure

Criteria	Rationale	Challenges/Limitations	Practical Considerations
			Consider whether a factor represents a cumulative life cycle effect or a transient effect.
4. The risk factor is not modifiable through the provider actions	The goal is to adjust for factors independent of the care provided. Adjusting for the care provided contravenes this goal.	It may be difficult to identify in practice the extent to which care provision might affect a particular social risk factor	
<b>C. The social risk factor is not something that the provider can manipulate.</b>			
5. The risk factor is resistant to manipulation or gaming	This criterion ensures validity of performance score as representing quality of care (versus, for example, upcoding)	It is often difficult to anticipate how a measure might be manipulated.	<p>Prioritize specific coding over vague coding: vague codes are more vulnerable to manipulation; however, there are vaguely coded variables that may be important nevertheless, so this would not fully disqualify an indicator.</p> <p>Prioritize continuous over dichotomous measures of the same construct where applicable to reduce “edge” gaming.</p> <p>Carefully monitor high-leverage factors (i.e., risk factors that are not prevalent but highly predictive of outcomes), as they may be important but especially attractive for gaming.</p>

## GUIDANCE REGARDING THE PROCESS FOR USING SELECTION CRITERIA

Given that there is more than one appropriate way of accomplishing the same ideal objective, the committee does not offer a formula for using the criteria specified above. However, the committee does offer guidance on how to apply these criteria. With respect to applying criteria to individual social risk factors, indicators, or measures, the committee proposes:

- The rationale for selecting a factor, as well as alternatives considered, is transparent.
- Trade-offs with respect to how well a factor meets the criteria are discussed and weighed in the final determination of whether to include a factor.
- Although a social risk factor may meet all five criteria, it may still be excluded from inclusion due to practical considerations—for example, if it lacked face validity or due to data limitations.

The committee also offers guidance on developing a set of social risk factors that could be used together for accounting purposes:

- Priority should be given to how a set of indicators perform together over the performance of each indicator on its own.
- When criteria are met, common measures across outcomes are preferred as this would be more practical and may improve the face validity of the models.
- Where possible and appropriate, it is preferred to use a common set of adjusters across the different measures in a given setting.

For both individual social risk factors (and respective indicators and measures) and also a set of social risk factors, the committee offers the following considerations:

- In terms of how measures are implemented and concerns of misuse:
  - Stakeholders such as providers and patient advocates have an opportunity to weigh in on the measures
  - The opportunities for gaming and misuse are discussed and considered. Often, potential stakeholders may have more insights into this process than modelers.
- It is critical to monitor the application of the selected risk factors.
  - How and whether a social risk factor meets the criteria may require continuous evaluation and reassessment of criteria; these criteria are applied in a dynamic setting. As health care evolves and health care disparities get addressed, the justification for certain measures may lapse and others may become more important.
  - Monitoring is also necessary to assess whether the use of social risk factors in Medicare payment strategies is appropriately incentivizing both improved quality and reduction in health disparities. Yet the criteria themselves are meant to be stable and reapplied to allow for an adaptive system.

The next chapter returns to the social risk factor framework presented by the committee in its first report and applies the criteria outlined above to specific measures of social risk.



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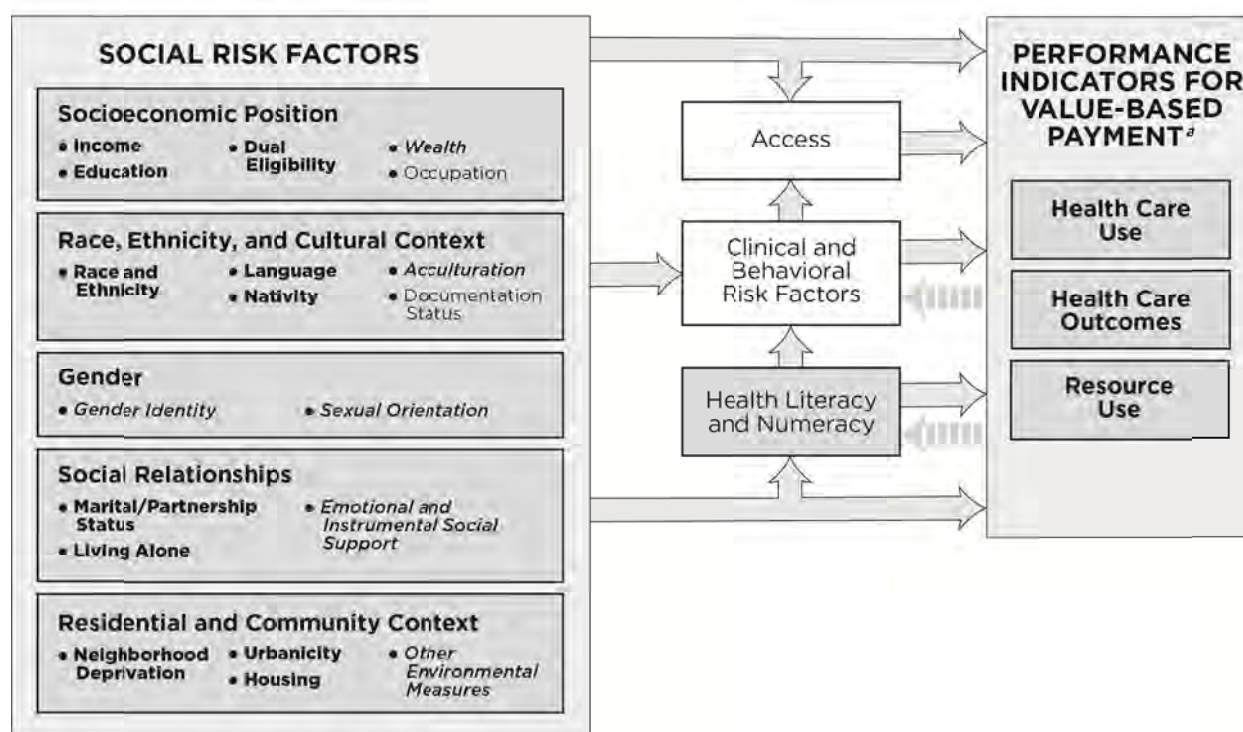
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## 3

## Applying Selection Criteria to Social Risk Factors and Health Literacy

In its first report, the committee presented a conceptual framework that illustrates the primary hypothesized conceptual relationships by which five social risk factors—socioeconomic position (SEP); race, ethnicity, and cultural context; gender; social relationships; and residential and community context—as well as health literacy may directly or indirectly affect measures of health care use, health care outcomes, and resource use outcomes among Medicare beneficiaries (NASEM, 2016a). The conceptual framework applies to all Medicare beneficiaries, including beneficiaries with disabilities and those with end-stage renal disease (ESRD). Although the committee acknowledges heterogeneity among Medicare beneficiaries (including among beneficiaries age 65 and older), the committee expects the effect of social risk factors to be similar for all Medicare subpopulations. As described in its first report, the committee considers variations in the effect of social risk factors among beneficiaries under age 65 with disabilities, beneficiaries age 65 and older, and beneficiaries with ESRD to fall within a continuous spectrum of effects. Notably, Medicare beneficiaries with disabilities differ systematically from persons with disabilities more generally, because eligibility for federal disability benefits requires that a person is unable to work, has a low income, and meets certain medical criteria (SSA, n.d.). Therefore, Medicare beneficiaries with disabilities are by definition a socially at-risk group. Additionally, the Centers for Medicare & Medicaid Services (CMS) uses the same measures to assess quality, outcomes, and resource use for Medicare beneficiaries regardless of the origin for entitlement (i.e., whether an individual qualified because of age, disability, or ESRD). The committee still holds these assumptions to be true.

In its first report, the committee also identified specific indicators that correspond to the five social risk factors. These indicators represent ways to measure the latent constructs of the social risk factors and are distinct from specific measures. For example, education is an indicator of socioeconomic position that can be measured in multiple ways (e.g., highest degree attained, years of education). Figure 3-1 presents a modified version of the committee’s conceptual framework, expanded to include indicators of each social risk factor. The framework also groups the domains that the committee embraced in its expanded definition of “health outcomes” in its first report (health care use, health care outcomes, and resource use) under the umbrella of *performance indicators for value-based payment (VBP)*.



**FIGURE 3-1** Conceptual framework of social risk factors and performance indicators for value-based payment (VBP).

NOTE: This conceptual framework illustrates primary hypothesized conceptual relationships. For the indicators listed in bullets under each social risk factor, bold lettering denotes measurable indicators that could be accounted for in Medicare VBP programs in the short term; italicized lettering denotes measurable indicators that capture the basic underlying constructs and currently present practical challenges, but are worth attention for potential inclusion in accounting methods in Medicare VBP programs in the longer term; and plain lettering denotes indicators that have considerable limitations.

<sup>a</sup> As described in the conceptual framework outlining primary hypothesized conceptual relationships between social risk factors and outcomes used in value-based payment presented in the committee's first report (NASEM, 2016a), health care use captures measures of utilization and clinical processes of care; health care outcomes capture measures of patient safety, patient experience, and health outcomes; and resource use captures cost measures.

In this chapter, the committee applies the criteria identified in Chapter 2 of this report to these social risk factors and health literacy (and their respective indicators), and also identifies the rationale and limitations of each factor and indicator relative to those criteria. To review, the committee identified three broad categories of criteria for selecting social risk factors that could be accounted for in Medicare VBP programs:

- The social risk factor is related to the outcome;
- The social risk factor precedes care delivery and is not a consequence of the quality of care; and
- The social risk factor is not something the provider can manipulate.

The committee also identified practical considerations. These are empirical questions that may be best assessed using specific measures and data. Additionally, data collection and measurement is the subject of the committee's fourth and next report. Because the committee can recommend new data sources and new methods of data collection in this next report (and is therefore not limited to existing measures and data sources), the criteria related to practical considerations such as issues of measurement feasibility are not discussed exhaustively in this report.

## SOCIOECONOMIC POSITION

Socioeconomic position describes an individual's absolute and relative position in a society's stratification system. SEP captures a combination of access to material and social resources as well as relative status—prestige- or rank-related characteristics (Krieger et al., 1997). As described in the committee's first report (NASEM, 2016a), the committee prefers *socioeconomic position* to the more common phrase *socioeconomic status*, because *socioeconomic position* is a broader term encompassing resources as well as status (Krieger et al., 1997). SEP is commonly measured using indicators including income and wealth, education, and occupation and employment. In the medical field, insurance status (whether someone has insurance and the type of insurance—i.e., public or private) is also used as a proxy for SEP.

### Income

Individual income can affect health and health care outcomes through multiple pathways (Braveman et al., 2005). It can affect health directly as a means of purchasing health care and indirectly as a means of acquiring health promoting resources, such as better education, housing, and nutrition (Adler and Newman, 2002). This effect is stronger at lower levels of income (i.e., poverty and deprivation). However, the association between income and health is graded such that increases in income are associated with increases in health status above a threshold of material deprivation (i.e., poverty level) (Adler et al., 1994; Braveman et al., 2010; NASEM, 2016a). Thus, literature supports a conceptual relationship between income and health-relevant measures of interest to Medicare quality and payment programs. As identified in the committee's first report, literature indicates that income may influence health care utilization, clinical processes of care, health care costs, health outcomes, and patient experience (NASEM, 2016a). Therefore, literature also supports an empirical association as well. Income is generally not a consequence of health care. Income is potentially susceptible to rapid changes as a consequence of a health event across individual trajectories. However, income's average association with health care outcomes is not likely to change rapidly. In other words, income precedes care delivery and is not a consequence of the quality of care.

Income is the most commonly used measure of economic resources (Braveman et al., 2005), largely because there are available measures, but also because income has strong face validity. When self-reported, measuring income can be sensitive to collect, but reliable methods exist to accurately, reliably, and feasibly collect income data (Moore and Welniak, 2000). These measures are likely to be resistant to gaming or manipulation. Although there may be less variation in income among older populations, especially the very old (age 80 and older), because income includes both earned and unearned income, there is likely to be sufficient variation in income among the Medicare population (albeit a narrower range than among the general



population) to capture the full variation in SEP (HHS, 2015c). In sum, income is related to health care outcomes of interest, precedes care delivery and is not a consequence of the quality of care, is not something the provider can manipulate, and meets practical considerations.

### **Wealth**

Wealth is an alternate measure of economic resources that represents total accumulated economic resources (assets). Wealth is likely to be as important for health and health care outcomes as is income as a means of acquiring health care and health-promoting resources (Braveman et al., 2005; Deaton, 2002; NASEM, 2016a). Moreover, whereas income may capture less variation in economic attainment among Medicare beneficiaries, especially the very old, wealth may capture more variation. Therefore, wealth may be a more sensitive indicator of SEP for the very old (Allin et al., 2009). Wealth can also buffer the effects of changes in income (such as those due to unemployment or illness) (Cubbin et al., 2011). However, wealth may still be susceptible to changes as a consequence of health events among individuals (Lee and Kim, 2008). For example, onset of a new chronic condition may require out-of-pocket medical expenditures and costs associated with rearranging housing or transportation. These costs can lead an individual to incur both a sudden increase in health-related costs as well as costs that accrue over time, both of which could deplete wealth. This may be particularly relevant for low-income persons who also share a disproportionate of disease burden. However, as with income, the association between wealth and health at a population level is unlikely to be a consequence of health care. An additional challenge of using wealth as an indicator of SEP is that there are substantial differences by subgroups, especially racial and ethnic subgroups and by gender. For example, blacks have significantly less wealth compared to whites even at the same income levels (Kochhar and Fry, 2014; Shapiro et al., 2013). Moreover, relatively few studies have examined the relationship between wealth and health care outcomes (Braveman et al., 2005; NASEM, 2016a). Hence, there is little evidence documenting an empirical association. This may be due in large part to the difficulty of measuring net worth. Like income, it can be sensitive to assess. Unlike income, although some good measures exist, missing data at the upper and lower ends of the wealth distribution can be problematic (Cubbin et al., 2011; Eckerstorfer et al., 2015; Eggleston and Klee, 2015). Collecting self-reported net worth is challenging because many individuals do not know the value of their net worth or what assets they have (Braveman et al., 2005; Eggleston and Klee, 2015). Some studies have used simplified or proxy measures such as home or car ownership, but there remains little empirical evidence on the association between wealth and health care outcomes (Braveman et al., 2005). Literature supports a conceptual relationship between wealth and health care outcomes of interest, but a lack of available measures and thus evidence of an empirical association present limitations for using wealth as an indicator of SEP. Practical considerations present challenges for collecting accurate wealth data.

### **Insurance Status: Dual Eligibility**

In health research, numerous studies assess the effects of insurance coverage on health status (see, for example, IOM, 2009a), but its use here is restricted to its use as a proxy for resources to support health and health care and thus as an indicator of SEP. For the Medicare population, Medicaid eligibility—also referred to as dual (Medicare and Medicaid) eligibility—is an indicator of insurance status that can be used as a proxy that captures elements of both income and wealth. Dual eligibility captures elements of income, because Medicaid eligibility



requires an income below a certain threshold (set at a national minimum level of 133 percent of the federal poverty level [FPL]) (CMS, n.d.-a). However, like any measure of insurance, it is generally an imperfect proxy of income, because it does not capture the full continuum of SEP. This is particularly true for dual eligibility, which is a dichotomous measure representing high or low income. Additionally, individuals with low incomes that exceed Medicaid income thresholds may be eligible for Medicaid coverage under “spend down” rules that allow medically needy individuals to spend down (or, subtract) medical expenses from their income (CMS, n.d.-b). Dual eligibility also captures elements of wealth, because Medicaid eligibility also includes asset limits (CMS, n.d.-a). Similar to income, individuals with few assets that nonetheless exceed the Medicaid asset threshold may “spend down” their assets to become eligible for Medicaid coverage. Because dual eligibility status interacts with the health system in this way, it is a measure that captures both income and wealth in a particular functional form (that of the eligibility criteria) that may or may not be the best predictor of performance indicators used in VBP. Importantly, because states establish Medicaid eligibility, what dual eligibility represents also varies by state. Similarly, Medicaid covers long-term care for those who meet additional eligibility requirements, in which case dual eligibility would capture still another functional form of health-related resources among institutionalized persons.

Dual eligibility may also capture dimensions of health status that are unmeasured by other data sources, because it represents insurance coverage as a concept distinct from SEP. For example, dual eligibles receive more generous health coverage through Medicare and Medicaid than uninsured or underinsured persons who have relatively higher SEP, but who are ineligible for Medicaid coverage because they have income and/or wealth just above the eligibility threshold. Relatedly, dual eligibility may capture clinical characteristics covering those who are under age 65 and eligible for Medicaid coverage based on disability. As noted in the introduction, the committee expects social risk factors to operate similarly among all Medicare beneficiaries including disabled persons. However, the committee notes that in its use here as a proxy measure for SEP as a social risk factor that could be accounted for in Medicare quality measurement and payment (and not as a characteristics of the population to which the social risk factor framework applies), dual eligibility may capture health status–related elements of disability because of eligibility criteria for Medicaid coverage based on disability. Because dual eligibility captures elements of income, wealth, and health status, dual eligibility can be considered a broader measure of health-related resource availability that captures medical need.

Dual eligibility is empirically associated with health and health care outcomes including health care utilization, clinical processes of care, and patient experience (NASEM, 2016a). Dual eligibility also has face validity, particularly among health and medicine researchers, and is a relatively easy to measure and collect. Additionally, dual eligibility is not a consequence of care and likely to be resistant to gaming and manipulation at the population level. Hence, dual eligibility is an available proxy measure of resources available for goods and services to support health and health care.

### Occupation

Occupation includes both employment status (whether an individual participates in the paid labor force or not, and if so, to what degree), as well as the type of occupation among the employed (Adler and Newman, 2002; NASEM, 2016a). Additionally, occupation can be collected in its current state or in a past state, as primary lifetime occupation. Among Medicare beneficiaries, fewer of whom participate in the paid work force than the general population—

especially disabled Medicare beneficiaries who by definition cannot work—employment status may be more relevant than job type. Occupation can affect health through exposure to environmental health hazards as well as through psychosocial risks associated with job strain, lack of control, and increased stress (Kasl and Jones, 2000; Theorell, 2000). Additionally, literature suggests that employment and occupation are associated with health outcomes including unhealthy behaviors, morbidity, and mortality (NASEM, 2016a). Literature therefore supports a conceptual relationship between occupation and performance indicators used in VBP. However, there is relatively little empirical evidence on the association between employment or occupation and health care outcomes, especially using U.S. data (NASEM, 2016a). This is likely because of the difficulty of collecting and classifying occupation in the United States. Measures of occupation and employment are likely to be resistant to gaming and manipulation and the United States maintains a Standard Occupational Classification System, but many of the categories are too heterogeneous to be meaningful (Braveman et al., 2005). Additionally, some groups such as retired persons and homemakers may not have an employment related to occupation, making it difficult to identify their SEP. Despite these measurement challenges, occupation and employment are not logical consequences of the quality of care, although like other measures of SEP, employment is potentially susceptible to changes as a consequence of a health effect, such as losing a job because one becomes too ill to work. However, again, at the population level, occupation is unlikely to be a consequence of health care quality. In short, like wealth, occupation is a conceptually powerful indicator of SEP, but practical considerations limit its potential use.

### Education

Education is important for health because it shapes future employment and economic resources (Adler and Newman, 2002; IOM, 2014; NASEM, 2016a). Education can therefore affect health indirectly through other indicators of SEP—employment, occupation, and income. At the same time, education can also affect health by enabling individuals to access and understand health information and health care and to make decisions that promote health and reduce health risks, and by contributing to a patient’s ability to advocate for him- or herself in health care (Cutler and Lleras-Muney, 2006; IOM, 2014). Thus, literature supports a conceptual relationship between education and performance indicators used in VBP. Education is strongly associated with health behavior, health status, morbidity, and mortality (IOM, 2014). However, the relationship between health and health care outcomes may vary across age cohorts owing to changes in the distribution of education over time (Lynch, 2003). Nevertheless, as identified in the committee’s first report, literature indicates that education may influence health care utilization, health outcomes, and patient experience, thus providing support for an empirical association (NASEM, 2016a). Education has face validity, precedes care delivery, and is not a logical consequence of care. Education can be measured as continuous or categorical years of schooling completed or as educational attainment measured by credentials of formal schooling (e.g., high school diploma, college degree) (Braveman et al., 2005; IOM, 2014). These measures are feasible to collect and likely to be resistant to gaming. In short, education is related to health care outcomes of interest, precedes care delivery and is not a consequence of the quality of care, is not something the provider can manipulate, and meets practical considerations.

## Summary

Income and education are promising indicators. Wealth is likely to be strongly associated with health and health care outcomes, but accurate data is difficult to collect. Dual eligibility meets practical criteria and can be considered a proxy for SEP as a measure of resources available for goods and services to support health and health care. Occupation is likely to be strongly associated with performance indicators used in VBP, but practical considerations limit its potential use.

## RACE, ETHNICITY, AND CULTURAL CONTEXT

### Race and Ethnicity

Race and ethnicity are social categories that represent dimensions of a society's stratification system by which resources, risks, and rewards are distributed. Categories of race and ethnicity capture a range of health-relevant dimensions, especially those related to social disadvantage. These include access to social institutions and rewards; behavioral norms and other sociocultural factors; inequitable distribution of power, status, and material resources; and psychosocial exposures like discrimination and bias (Phelan and Link, 2015; Williams, 1997). Race and ethnicity are strongly associated with health and health care outcomes, even after accounting for measures of SEP (Krieger, 2000; LaVeist, 2005; NASEM, 2016a; Williams, 1999; Williams et al., 2010). This effect may be caused by the lack of comparability of a given SEP measure across racial and ethnic groups (for example, as described above, wealth is differentially correlated with income by race), the importance of other unmeasured social factors that are patterned by race and ethnicity (for example, neighborhood environments, discrimination, immigration-related factors, language), and measurement error in SEP (NASEM, 2016a). Together, this literature supports a conceptual relationship between race and ethnicity and health. In its first report, the committee identified literature indicating that race and ethnicity may influence health care utilization, clinical processes of care, health care costs, health outcomes, patient safety, and patient experiences of care (NASEM, 2016a). Thus, literature supports an effect. Race and ethnicity precede care delivery and are not logical consequences of care. However, observed differences by race and ethnicity may represent differences in the quality of care received, including differences related to poor communication, poor cultural competence, discrimination, and bias (IOM, 2003a).

Race and ethnicity are typically identified through self-reported categories, and measures of race and ethnicity are resistant to gaming or manipulation. Refinement of standardized race and ethnicity measures is still needed. In health research, Hispanic ethnicity is frequently combined with racial categories. The most commonly used "racial" categories are: non-Hispanic white, non-Hispanic black, Hispanic, and Asian (see, for example, AHRQ, 2016; CMS, 2016). This categorization is problematic because it conceals substantial heterogeneity within certain categories. In particular, there are substantial differences across Asian groups from different countries. Additionally, Hispanic groups from different (Latin American) countries use racial classifications that differ from U.S. racial classifications (for example, who is considered black), because they reflect different sociopolitical constructs (Wade, 1997). Some existing standards include federal standards from the White House Office of Management and Budget, which the Department of Health and Human Services (HHS) is increasingly adopting (CDC, 2010; IOM,

2009c; OMB, 1995), and those recommended in a 2009 Institute of Medicine (IOM) report (IOM, 2009c). Because race and ethnicity are conceptually distinct, these standards recommend using separate items for collecting race and ethnicity. In sum, race and ethnicity are related to health care outcomes, precede care delivery and are not a consequence of the quality of care, are not things a provider can manipulate, and meet practical considerations. At the same time, the committee acknowledges that causal pathways by which race and ethnicity influence health include mechanisms that can be related to quality of care.

### **Language**

Language typically represents language barriers, such as speaking a primary language that is not English, having limited English proficiency, or otherwise needing interpreter services. This includes deaf American Sign Language users. Language barriers are strongly associated with health and health care outcomes—in particular, poorer access to health care, poorer health status, poorer quality care, including less recommended care, and more adverse health events (NASEM, 2016a). Thus, literature supports both a conceptual relationship and an empirical association between language and health care outcomes. Language is not a consequence of health care. Measures of language are resistant to gaming or manipulation and are also relatively easy to assess. The same 2009 IOM report recommending standards for collecting and measuring race and ethnicity data also included recommended standards for language data (IOM, 2009c). Language is thus related to health care outcomes, precedes care delivery and is not a consequence of the quality of care, is not something the provider can manipulate, and meets practical considerations.

### **Nativity, Immigration History, and Acculturation**

Nativity refers to country of origin. Immigration history includes refugee and documentation status, as well as duration in the United States. Acculturation describes the extent to which an individual adheres to the social norms, values, and practices of his or her own ethnic group or home country or to those of the United States (NASEM, 2016a). Because acculturation is expected to increase with the amount of time spent in the United States, duration in the United States is also used as a proxy for acculturation. Nativity and duration in the United States may influence health and health care outcomes through differences in language, communication, and health care use (IOM, 2014). Nativity and immigration history may also expose individual to different health risks or protective factors prior to arriving in the United States. Risks include environmental exposures, infectious diseases, and poverty, whereas protective factors may arise from cultural differences that shape health behaviors such as smoking, diet, and physical activity (IOM, 2014). These characteristics are likely to have important interactions with race and ethnicity (Jerant et al., 2008; Newhouse et al., 2012). Literature therefore supports several pathways by which nativity, immigration history, and acculturation may affect health. In its first report, the committee identified literature indicating that nativity may influence clinical processes of care and patient experience, supporting an empirical association (NASEM, 2016a). Evidence on the relationship between acculturation and health care outcomes is not well established, in part due to measurement challenges (Abraído-Lanza et al., 2006; IOM, 2014; NASEM, 2016a). These factors are not logical consequences of health care or health events.

Measures of nativity include identifying a specific country of origin or a dichotomous measure comparing foreign-born to U.S.-born individuals. These measures of nativity and

measuring duration in the United States could therefore feasibly be collected during an office visit or in an electronic health record. Measures of nativity and time in the United States are also less sensitive than measures of documentation status or citizenship (IOM, 2014). Because there is a strong interaction between acculturation and race and ethnicity, measures of acculturation frequently assess acculturation among specific subgroups (e.g., Hispanic immigrants) (HHS, 2014). Nativity, duration in the United States, and measure of language can be crude proxies for acculturation. Measures of nativity, immigration history, and acculturation are likely to be resistant to gaming or manipulation. All told, measures of nativity and immigration history are related to health care outcomes, precede care delivery and are not a consequence of the quality of care, are not things a provider can manipulate, and meet practical considerations. Literature supports a conceptual relationship between acculturation and health care outcomes of interest, but existing measures pose challenges to feasibility. Consequently, there is a lack of empirical evidence about the relationship between acculturation and performance indicators used in VBP.

### Summary

Race, ethnicity, language (especially limited English proficiency), and nativity are promising indicators, particularly in combination (Goodell and Escarce, 2007). Literature supports a conceptual relationship between acculturation and health care outcomes of interest, but existing measures have limitations and empirical evidence is lacking. Documentation status as a measure of immigration history is likely to be sensitive to collect.

### GENDER

The committee uses the term *gender* broadly to capture the social dimensions of gender as distinguished from biological effects of sex. Gender captures both normative gender identity and gender minorities, including individuals who identify as transgender, intersex, or otherwise non-conforming gender. Normative gender categories (men and women) are strongly associated to health and health care outcomes (NASEM, 2016a). However, deconstructing the effects of gender and sex can be challenging. Frequently, investigators do not specify which construct they are measuring and use the terms interchangeably (for example, incorrectly referring to sex differences as gender differences), and because sex and gender may interact to produce health outcomes (Krieger, 2003). Nevertheless, gender has face validity, is not a consequence of care, and there are good self-reported measures that are resistant to gaming. For accountability purposes in Medicare payment, gender is already included as a risk factor in clinical adjustment.

### Gender Identity

Gender minorities may experience differences in health and health care outcomes, but there remains little empirical evidence. Additionally, although gender identity is not a consequence of health care, what evidence does exist suggests that differential health care outcomes may arise from miscommunication, lack of cultural competence, or bias in the patient-provider encounter (IOM, 2011). The lack of evidence is due in part to the lack of a good existing measure, although, based on recommendations from a 2011 IOM report, HHS has been actively working to improve data collection. In recent years, questions on gender identity have been included in national surveys such as the Behavioral Risk Factor Surveillance System,



National Health Interview Survey, National Survey of Family Growth, National Survey on Drug Use and Health, and National Health Service Corps Patient Satisfaction Survey (Copen et al., 2016; HHS, 2015b; Ward et al., 2014). Additionally, the Office of the National Coordinator's (ONC's) final rule specifying meaningful use criteria included gender identity measures (HHS, 2015a). Measures of gender identity are likely to be resistant to gaming or manipulation, but because there is a very low prevalence of gender minorities, gender identity is unlikely to have a significant effect in adjustment models and other methods of accounting for social risk factors. Emerging literature supports a relationship between gender identity and health care outcomes of interest, but existing measures pose challenges to feasibility. Hence, the empirical association is poorly established.

### Sexual Orientation

Sexual orientation includes individuals who identify as lesbian, gay, bisexual, queer, questioning, or otherwise non-conforming. Sexual orientation is typically defined with respect to three dimensions: attraction, behavior, and identity (IOM, 2011). Like gender minorities, sexual minorities may experience differences in health and health care outcomes although there is currently little empirical evidence (NASEM, 2016a). Moreover, as with gender identity, emerging evidence suggests that differential health care outcomes among sexual minorities may be largely attributable to drivers related to the quality of care provided (e.g., miscommunication, poor cultural competence, discrimination) (Elliott et al., 2015; IOM, 2011). Similar to the practical challenges of establishing better evidence between gender identity and health care outcomes, there are no good existing measures, although the HHS has also included sexual orientation items in the surveys discussed above, and ONC also recommended inclusion of sexual orientation in its meaningful use criteria (CDC, 2010; HHS, 2015a,b). One limitation of existing measures is that they frequently only capture one dimension of sexual orientation, and identifying the dimension or dimensions most relevant to the outcome of interest can be conceptually challenging (IOM, 2011). Specifically, some individuals do not present consistently across the three dimensions of sexual orientation. For example, some men report that they have sex with other men, but do not identify as gay. In cases of such inconsistency across dimensions, identifying the dimension or dimensions most relevant for the outcome of interest will be important to accurately classify individuals. Taken together, like gender identity, emerging literature supports a relationship between sexual orientation and health care outcomes of interest, but poor existing measures have limited available evidence.

### Summary

Normative gender categories (men and women) are strong candidates for inclusion in accounting methods, despite the fact that effects of gender are difficult to separate from biological effects of sex in measurement. However, the committee notes that gender is already included in clinical risk adjustment. Promising measures of gender identity and sexual orientation that HHS is currently testing and collecting data on could be revisited for potential inclusion when there is more empirical evidence supporting the relationship between gender identity and sexual orientation and health care outcomes. Certainly, in the short term, there is likely to be a very low prevalence of individuals who have non-normative gender identities. In addition, the relationship of these constructs to health care outcomes is not well established.



Thus, accounting for variations in gender identity is unlikely to have a significant effect in accounting methods.

## SOCIAL RELATIONSHIPS

Many dimensions of social relationships are important to health, health care use, and health care outcomes (Berkman and Glass, 2000; Cohen, 2004; Eng et al., 2002; Holt-Lunstad et al., 2010; House et al., 1988; Umberson and Montez, 2010). These include access to social networks that can provide access to resources, including material resources and emotional and instrumental social support. Social relationships may be especially relevant to health care access and outcomes among older adults and persons with limitations in activities of daily living (ADLs) and instrumental activities of daily living (IADLs) (Cornwell and Waite, 2009; Hawton et al., 2011; Houser et al., 2010; Seeman et al., 2001; Tomaka et al., 2006). Hence, literature supports a conceptual relationship between social relationships and health care outcomes of interest. In health research, social relationships are typically assessed using three indicators: marital/partnership status, living alone, and emotional and instrumental social support.

### Marital/Partnership Status

Marital or partnership status is a foundational structural element of social relationships that is also often considered an important indicator of social support. Being married or partnered is associated with better health care outcomes, while being single, widowed, or otherwise unpartnered is associated with worse health care outcomes (NASEM, 2016a). Literature suggests that this relationship holds true for both heterosexual partners and same-sex couples (Liu et al., 2013). Additionally, the relationship between marriage and health outcomes interacts with gender. Not only might marriage affect health in different ways by gender, but some evidence also suggests that marriage is also more beneficial to men than women (IOM, 2014). Thus, there is a conceptual relationship between marital/partnership status and health. In its first report, the committee identified literature indicating that marital status may influence health care utilization, clinical processes of care, health care outcomes, patient experiences of care, and health care costs (NASEM, 2016a). Thus, there is evidence of an empirical association. It is important to note demographic shifts in family structure over the past several decades—marriage rates have declined while the number of cohabiting individuals and persons who never married has increased (Wang and Parker, 2014). Some evidence suggests that the relationship between marital status and health is changing along with these demographic shifts (Liu and Umberson, 2008). It will therefore be important to monitor the empirical association between marital/partnership status and health and revisit assumptions about their conceptual relationship over time.

Marital or partnership status is not a logical consequence of care, but is potentially susceptible to rapid changes—both gaining and losing a partner—across individual trajectories. However, at the population level, marital/partnership status is not likely to be susceptible to rapid changes. Marital and partnership status is likely to contribute to unique variation in outcomes of interest, especially among older adults. Additionally, there is likely to be greater variability in the future with the increase in the never-married and cohabiting populations, which are increasingly tied to SEP, race, ethnicity, and community of residence (Aughinbaugh et al., 2013; Tamborini, 2007; Wang and Parker, 2014). Measures of marital or partnership status include dichotomous

measures of whether someone is married or not and whether someone is partnered or lacks a partner. Other measures include more categories, such as individuals who are single, widowed, and divorced. These measures are relatively easy and acceptable to collect via self-report and are likely to be resistant to gaming. Marital or partnership status is therefore related to health care outcomes, precedes care delivery and is not a consequence of the quality of care, is not something the provider can manipulate, and meets practical considerations. However, demographic changes suggest that monitoring the relationship between marital/partnership status and health outcomes over time is needed.

### **Living Alone**

Living alone is a structural element of social relationships. In health research, living alone is typically an indicator of social isolation or loneliness, which have been shown to have important consequences for health (Berkman and Glass, 2000; Brummett et al., 2001; Cohen, 2004; Eng et al., 2002; House et al., 1988; Wilson et al., 2007). Living alone is also likely to at least partly capture elements of social support. Thus, literature supports a conceptual relationship between living alone and health care outcomes. Living alone is strongly associated with health, although literature on the association between living alone and health care outcomes is sparse (NASEM, 2016a). Nevertheless, the committee identified literature indicating that living alone may influence health care utilization, clinical processes of care, and health outcomes in its first report (NASEM, 2016a). Living alone is potentially susceptible to rapid changes, including changes resulting from a health care interaction. For example, an ill parent may temporarily move in with his or her child following a health event or the advice of a doctor. However, living alone is not likely to be susceptible to rapid changes on average. Living alone is unlikely to vary across reporting units substantially, although there may be specific geographic regions with substantially higher prevalence of older adults living alone. Therefore, it may be important to measure living alone with regional interactions. Living alone can be fairly easily and feasibly assessed in the clinical setting using a dichotomous measure (living alone or not) or more finely graded household composition measures (e.g., living alone, with one other person, two other persons, and so on). Thus, living alone is related to performance indicators used in VBP, precedes care delivery and is not a consequence of the quality of care, is not something the provider can manipulate, and meets practical considerations.

### **Emotional or Instrumental Social Support**

Social support is a key function of social relationships and includes emotional elements (such as through caring and concern) as well as instrumental components (such as material and other practical supports). Emotional social support may affect health through psychosocial mechanisms—for example, boosting self-efficacy to practice health-promoting behaviors like quitting smoking or to follow a treatment regimen (Berkman and Glass, 2000). Emotional social support may also buffer negative effects of health risks or facilitate health behaviors (IOM, 2014). At the same time, social support can have a negative effect on health, for example, from distress caused by negative social interactions or because negative influences promote risky health behaviors (Uchino, 2006). Instrumental social support can support access to health-promoting resources (e.g., delivery of nutritious meals) and health care (e.g., providing transportation to a doctor's appointment) (Berkman and Glass, 2000). Hence, literature supports a conceptual relationship between social support and performance indicators used in VBP. In its

first report, the committee identified literature indicating that social support may influence health care utilization, clinical processes of care, health outcomes, and patient experiences of care (NASEM, 2016a). Generally, higher levels of social support are associated with better health care outcomes while lower levels of social support are associated with poorer health care outcomes (NASEM, 2016a). Thus, there is evidence of an empirical association.

Similar to indicators of SEP, social support is potentially susceptible to rapid changes, including changes that result from health care interactions. For example, a person who previously lacked social support may gain it following a health event, because members of their social network reach out to help the person in their recovery. Or, a physician may provide instrumental support such as organizing meal deliveries or transportation services during a clinical encounter. However, on average, social support is not a consequence of the quality of care. For this reason, researchers often measure an individual's perceived or potential social support through measures of social connections or social integration, which may represent potential sources of social support (IOM, 2014).

Measures of social support are likely resistant to gaming and manipulation, but they may pose feasibility issues. Some measures have many items and are burdensome to collect or may only assess one element of social support (e.g., instrumental but not emotional support; perceived support versus actual support). Additionally, because social support is multidimensional, identifying the measure that represents the most relevant dimension for a given health care outcome can be challenging. Despite these limitations, measures of social support are still likely to capture elements of social relationships that are relevant for health care outcomes. Taken together, emotional or instrumental social support is related to health care outcomes, precedes care delivery and is not a consequence of the quality of care, is not something the provider can manipulate, and generally meets practical considerations, with some limitations.

### Summary

Marital status and living arrangements (living alone) are likely to influence health and health care outcomes, are easy to measure, and may at least partly capture elements of emotional and instrumental social support. Some evidence suggests that the relationship between marital/partnership status and health is changing along with demographic shifts, which point to a need to reassess the empirical associations and revisit assumptions about the conceptual relationship over time. Emotional social support and instrumental social support are likely to influence health care outcomes. However, because social support is multidimensional, identifying the measure that represents the most relevant dimension for a given health care outcome may pose both conceptual and practical challenges for data collection and measurement.

## RESIDENTIAL AND COMMUNITY CONTEXT

Residential and community context refers to a broad set of characteristics that could be important to health and health care processes. These include compositional characteristics that represent aggregate characteristics of neighborhood residents, characteristics of physical and social environments (i.e., environmental measures), as well as policies, infrastructural resources, and opportunity structures that influence individuals' everyday lives (NASEM, 2016a).

### Compositional Characteristics

Compositional characteristics of communities include, for example, dimensions of SEP, the proportion of racial and ethnic minority residents, foreign-born residents, single-parent households, and English language proficient residents. Compositional characteristics can be interpreted to represent a combination of environmental effects, group-level effects, and as a proxy for effects of individual characteristics. Compositional characteristics might affect health care outcomes in similar ways to their individual-level correlates. For example, lower education or lower income on average may influence health and health care outcomes through differences in accessing health-promoting and health care resources. Compositional characteristics might also affect health care outcomes through genuine group-level effects. For example, one study found that for foreign-born Latinos, living in neighborhoods with high-proportions of foreign-born Latinos was protective for health, potentially through greater levels of social support or through lower levels acculturation and its related health-damaging effects (e.g., less nutritious diets, less physical activity) (Acevedo-Garcia and Bates, 2008). Thus, literature supports a conceptual relationship. Studies have shown that community composition may affect health behaviors and other risk factors, morbidity, and mortality (Diez Roux and Mair, 2010). In its first report, the committee identified literature indicating that compositional characteristics may influence health care utilization, clinical processes of care, health care outcomes, and patient safety (NASEM, 2016a). Thus, literature also supports an empirical association between compositional characteristics and performance indicators used in VBP. Neighborhood compositional characteristics are not logical consequences of care (NASEM, 2016a).

Compositional characteristics can be assessed and used individually—for example, neighborhood racial and ethnic composition or neighborhood SEP. Compositional characteristics can also be assessed using composites, such as a summary indicator of neighborhood deprivation or neighborhood SEP. For example, Roblin (2013) developed a summary measure to assess the neighborhood SEP of a managed care organization’s enrollees measured at the Census tract level using seven indicators: percent of households with income below the FPL, percent of households receiving public assistance, percent of households with low income, percent of unemployed adult males, percent of adults with low educational attainment, median household income, and median home value. Of note, the level of aggregation (e.g., Census tracts, block groups, zip codes) is important when measuring compositional characteristics, because effects may vary based on the units of aggregation used (e.g., Krieger et al., 2002). Additionally, compositional characteristics can be messy to measure, because they can represent an individual characteristic or a genuine area-level effect. Furthermore, when used as a proxy for individual-level effects, they may also pick up area-level (environmental) effects. Measures are likely resistant to gaming or manipulation and relatively easy to assess (IOM, 2014). In total, despite some measurement issues, compositional characteristics of residential and community context are related to performance indicators used in VBP, precede care delivery and are not a consequence of the quality of care, are not things a provider can manipulate, and generally meet practical considerations.

### Environmental Measures

Environmental measures are indicators of residential and community context. They represent dimensions of residential environments including the physical or built environment (e.g., housing, walkability, transportation options, and proximity to services—including health

care services) as well as social environments (e.g., safety and violence, social disorder, the presence of social organizations, and social cohesion). Neighborhood environments can affect health through the distribution of health-relevant resources (e.g., access to recreational spaces, healthy foods, or health care services) or by exposing residents to environmental hazards (e.g., air pollution) (Diez Roux and Mair, 2010; IOM, 2003b). Neighborhood environments can also expose residents to physical and social exposures (e.g., decay, safety and violence, discrimination, segregation) that negatively affect health through stress and other psychosocial processes (Diez Roux and Mair, 2010; IOM, 2003b). Thus, there is a conceptual relationship between environmental measures of residential and community context and health care outcomes of interest. Additionally, environmental characteristics are not logical consequences of care.

Although environmental measures are likely to be associated with health and health care outcomes, evidence is currently limited (NASEM, 2016a). Environmental measures are potentially easy to collect, although measures need to be tested further. These measures are also likely to be resistant to gaming or manipulation. For example, a growing body of literature shows that some neighborhoods have substantially fewer safe recreation spaces, purveyors of healthy foods, and health care resources (Blustein et al., 2010; Diez Roux and Mair, 2010). However, evidence regarding the effect of these factors on health care outcomes is still lacking. This is therefore an emerging area of research that could be reevaluated for potential inclusion as more evidence emerges. In sum, environmental measures are conceptually powerful, but this is an emerging area of research and the empirical association with health care outcomes is poorly established. Two environmental measures for which there is more empirical evidence—urbanicity and housing—are discussed in more detail.

### *Urbanicity*

Urbanicity describes where an individual's place of residence falls on the spectrum from urban to rural. On one end of the spectrum, rural areas are associated with poorer access to health care owing to both distance and availability. Rural areas are also associated with increased risks from environmental hazards associated with rural industries such as pesticides in farming (IOM, 2003b). On the other end, urban areas may have regions with concentrated disadvantage that expose residents to negative effects of poverty, negative psychosocial exposures, and physical decay. Cities may also expose residents to environmental hazards associated with air pollution and safety hazards of old or densely populated buildings (IOM, 2003b). Thus, urbanicity is conceptually related to health care outcomes of interest. In its first report, the committee identified literature indicating that urbanicity may influence health care utilization, clinical processes of care, health care costs, and patient experiences of care, particularly at the far ends of the spectrum (NASEM, 2016a,b). This supports an empirical association. Urbanicity is not a logical consequence of care.

Urbanicity can be measured dichotomously (i.e., urban or rural), trichotomously (i.e., urban, suburban, rural), or on a graded spectrum (e.g., percent urban). Urbanicity can be measured as a provider or patient characteristic. Urbanicity as a provider characteristic (e.g., urbanicity of a hospital) can only measure between-unit effects, whereas patient urbanicity (e.g., rural versus urban patients) can be used to assess both within- and between-unit effects. However, patient urbanicity may differ in significant ways across provider urbanicity because, for example, rural patients who receive care from urban hospitals are likely to differ significantly from rural patients who receive care at rural hospitals. Measures are resistant to gaming and manipulation, and they are relatively easy to collect. However, assessing urbanicity may pose



some potential measurement issues related to identifying the appropriate size to avoid misclassification (Krieger et al., 2002). For example, at the Census tract level, there can be substantial variation in population and geographic size. Additionally, Census tracts may be too small to capture truly rural or urban areas, misclassifying, for example, areas within a large metropolitan county as “rural” or small towns in rural areas as “urban” (Hart et al., 2005). Taken together, urbanicity is related to health care outcomes, precedes care delivery and is not a consequence of the quality of care, is not modifiable through provider action, and generally meets practical considerations, with some limitations.

### *Housing*

Health-relevant elements of housing include housing stability homelessness, and quality and safety. Homelessness and housing instability (lack of access or threats to reasonable quality housing) (Frederick et al., 2014) are associated with lower access to care and higher physical and mental morbidity, as well as increased mortality (NASEM, 2016a). Additionally, poor housing conditions can expose individuals to harmful exposures such as lead or poor air quality, infectious disease, poor sanitation, and injury (IOM, 2003b; NASEM, 2016a). Thus, literature supports a conceptual relationship. Substantial literature supports associations between poor housing, housing instability, and homelessness with a wide range of health conditions covering physical and mental health (IOM, 2003b; Krieger, 2003). However, the empirical association between housing and health care outcomes is less well established. Literature suggests that homeless persons have high hospital readmission rates (Buck et al., 2012; Doran et al., 2013). In its second report, the committee also identified case studies in which housing conditions—stairs and loose wires—were considered risk factors for poor health care outcomes (e.g., falls) (NASEM, 2016b). In its first report, the committee identified a small number of studies examining the relationship between type of residence (namely, private or institutional post-discharge residence) and readmissions, and these studies found no association with either short-term (30-day) or long-term (1-year) readmissions (NASEM, 2016a). To that end, housing is potentially susceptible to rapid changes as a consequence of health care. For example, after a serious health event, a hospital may discharge a patient to an institutional setting such as a skilled nursing facility, which may have resources and conditions that differ substantially from the patient’s residence in the community. However, at the population level, housing is unlikely to be susceptible to rapid changes.

Measures of housing and homelessness are likely to be resistant to gaming or manipulation, but currently present some practical limitations. Homelessness is typically assessed using counts, which requires large teams to physically count homeless persons residing within a given geographic area (HUD, 2012). Some measures of housing insecurity also exist (e.g., how often an individual was worried about paying rent in the past month) (CDC, 2013), but these measures tend to be proxies for financial stress or SEP rather than assessing housing adequacy. Other measures, such as housing characteristics collected through the Medicare Current Beneficiary Survey (CMS, 2006) and those the Department of Housing and Urban Development uses to assess housing quality under its Section 8 program include many items requiring comprehensive inspections and can therefore be burdensome to collect (HUD, 1998).



## Summary

Compositional characteristics and environmental measures of residential and community context are related to health care outcomes, precede care delivery and are not a consequence of the quality of care, are not modifiable through provider action, and generally meet practical considerations, with some limitations. A measure of Census-tract neighborhood deprivation (i.e., a composite measure of neighborhood compositional characteristics) is likely a good proxy for a range of individual and true area-level constructs (compositional and environmental) relevant to performance indicators used in VBP. These measures are also feasible to obtain. Measures of urbanicity and housing are also available. Environmental measures are an emerging area of research and other measures could be revisited for potential inclusion when there is more empirical evidence and better measures.<sup>1</sup>

## HEALTH LITERACY

Health literacy is “the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions” (IOM, 2004, p.32). The committee does not conceive of health literacy as a social risk factor, but rather as the product of an individual’s skills and abilities (e.g., reading and other critical skills), social and cultural factors, education, health system demands, and the health care context (IOM, 2004). However, the committee included health literacy in its conceptual framework and retained it for consideration in this report because health literacy is included in the committee’s charge and because it is specifically mentioned in the Improving Medicare Post-Acute Care Transformation (IMPACT) Act and therefore of interest to Congress. Additionally, social risk factors like education and language influence health literacy. The committee’s conception of health literacy also captures the related concept of numeracy, or the ability to understand information presented in mathematical terms and to use mathematical knowledge and skills in a variety of applications across a variety of settings (IOM, 2014).

By definition, health literacy and numeracy are conceptually related to health care outcomes. Furthermore, in part because health literacy and numeracy are defined as barriers to accessing health care and adhering to treatment regimens, they may have strong face validity, especially among health care professionals. Low health literacy is associated with poorer knowledge of disease management and health-promoting behaviors and poorer health status (IOM, 2004). In its first report, the committee also identified literature indicating that health

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<sup>1</sup> The committee sees no conflict between this report and the 2013 IOM report *Variation in Health Care Spending: Target Decision Making, Not Geography*, which recommended against using area-level payment adjustments to account for regional practice patterns. That committee’s charge was to evaluate whether area-level differences in per-beneficiary spending were real and if so, to develop explanations for the variation. That report examined whether health care markets (characterized using relatively large geographies such as hospital service areas, hospital referral regions, or metropolitan statistical areas) were characterized by persistent patterns of spending driven by commonalities in medical decision making or other provider behavior and concluded that area spending variability was mainly due to price markups in the commercial insurance market and variation in the use of post-acute care in Medicare. In contrast, this report focuses on differences in performance indicators used in VBP (including variations in health care utilization and resource use, but also quality) driven by differences in social characteristics of a provider or other risk-bearing entity’s patient population. The use of area-level measures is therefore at much smaller geographic units (e.g., Census tracts of patient place of residence) and serves to more accurately characterize providers’ patient populations in Medicare quality measurement and payment programs.

literacy may influence health care utilization, clinical processes of care, health care cost, and patient experiences of care (NASEM, 2016a). This literature supports an empirical association. There is less evidence on effects of numeracy on health and health care outcomes (NASEM, 2016a). Available measures of health literacy and numeracy exist, but some of these instruments are long and may be burdensome to collect in the clinical setting (IOM, 2009b). Others capture limited components of health literacy—for example, reading and writing skills, but not listening and speaking skills, or an individual’s lack of background knowledge or cultural differences that may influence his or her understanding (IOM, 2004). The committee expects these measures to be resistant to gaming and manipulation.

Although the committee acknowledges that the burden of improving health literacy does not fall solely on the health care system, the health care system does carry significant responsibility. Health care providers can mitigate the effects of low health literacy (IOM, 2004; Pleasant et al., 2016). For example, a systematic review identified methods that are effective at improving patient health literacy (Berkman, 2011). Thus, taking a universal precautions approach, which assumes that it may be difficult for all patients to understand health information and access health services, health care providers can tailor care to each patient’s level of health literacy and numeracy to ameliorate the effects that low health literacy and numeracy have on health care outcomes (Kripalani et al., 2014). Similarly, health literate health care organizations can align the demands of the health care system with patients’ skills and abilities to make it easier for patients to access, understand, navigate, and use health information and health care services (Brach et al., 2012; IOM, 2012). Thus, health literacy is something providers can act upon and can be a consequence of the quality of health care provided.

### Summary

Health literacy is related to health care outcomes of interest and generally meets practical considerations. However, provider actions can mitigate the effects of low health literacy. Thus, to preserve incentives to provide effective care to patients with low health literacy, it would not be desirable to adjust or otherwise account for differences in health literacy in performance indicators used in VBP. Nevertheless, it may be desirable to reward or incentivize the greater effort or greater costs required to provide health literate care and thereby produce good health care outcomes in other ways.

### SYNOPSIS

Table 3-1 summarizes the social risk factors as well as health literacy, along with their rationale for inclusion in methods to account for them and potential limitations. In the table, specific criteria as they apply to indicators of social risk factors are indicated using the criteria numbers from the previous chapter (in parentheses). To review, the criteria are:

- A. The social risk factor is related to the outcome.
  1. The social risk factor has a conceptual relationship with the outcome of interest.
  2. The social risk factor has an empirical association with the outcome of interest.

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- B. The social risk factor precedes care delivery and is not a consequence of the quality of care.
  - 3. The social risk factor is present at the start of care.
  - 4. The social risk factor is not modifiable through provider actions.
- C. The social risk factor is not something the provider can act upon and manipulate.
  - 5. The social risk factor is resistant to manipulation or gaming.

**TABLE 3-1** Application of Selection Criteria to Indicators of Social Risk Factors and Health Literacy

Indicator	Definitional Issues	Rationale	Potential Limitations/Challenges	Other Considerations
<b>Socioeconomic Position</b>				
<b>Income</b>		<p>Has a conceptual relationship with performance indicators used in VBP (1)</p> <p>Has an empirical relationship with outcomes used in VBP (2)</p> <p>Not a consequence of care (3, 4)</p> <p>Resistant to gaming/manipulation (5)</p>	<p>Potentially susceptible to (rapid) changes as a consequence of a health event (3)</p> <p>Although measures are available, they may be sensitive to collect (2)</p>	<p>May be less salient especially among the very old (80+) where there is less variation in income—although income includes both earned and unearned income, so there is still sufficient variation (albeit narrower than the general population) among Medicare beneficiaries</p>
<b>Wealth (as an alternate measure of economic resources)</b>		<p>Has a conceptual relationship with performance indicators used in VBP (1)</p> <p>Has an empirical relationship with outcomes used in VBP (2)</p> <p>Not a consequence of care (3, 4)</p> <p>Resistant to gaming/manipulation (5)</p>	<p>Salient for Medicare beneficiaries, but sensitive to collect (people often don't know the value of their assets, or what assets they have); missing data at ends of distribution (2)</p> <p>Potentially susceptible to (rapid) changes as a consequence of a health event (3)</p>	

Indicator	Definitional Issues	Rationale	Potential Limitations/Challenges	Other Considerations
<b>Insurance (as a proxy for income)</b>	Specifically, Medicaid status/dual eligibility in Medicare payment context (represents eligibility requirements)	Has a conceptual relationship with performance indicators used in VBP (1) Has an empirical relationship with performance indicators used in VBP (2) Not a consequence of care (3, 4) Resistant to gaming/manipulation (5)	Less precise indicator of SEP; captures less variation, captures insurance coverage (1) Interacts with elements of the health system—e.g., spend down to meet income requirements (5)	
<b>Education</b>		Has a conceptual relationship with performance indicators used in VBP (1) Has an empirical relationship with performance indicators used in VBP (2) Not a consequence of care (3, 4) Resistant to gaming/manipulation (5)		Implications for health may vary across age cohorts due to changes in the distribution of education over time.
<b>Occupation</b>	Can cover both employment status (whether or not and to what degree an individual is employed) as well as the type of occupation among the employed; can be collected for current state or as primary lifetime occupation	Has a conceptual relationship with performance indicators used in VBP (1) Has an empirical relationship with performance indicators used in VBP (2) Not a consequence of care (3, 4) Resistant to gaming/manipulation (5)	Difficult to collect and classify in U.S. context (2) Potentially susceptible to (rapid) changes as a consequence of a health event (3)	Many Medicare beneficiaries are out of the labor force (including all who are eligible based on disability); some groups such as older women may not have an employment-related occupation, making it difficult to identify SEP

Indicator	Definitional Issues	Rationale	Potential Limitations/Challenges	Other Considerations
Other measures	Other proxy measures of access to economic resources include food sufficiency/insecurity, self-reported financial burden, and financial barriers	Has a conceptual relationship with performance indicators used in VBP (1) Not a consequence of care (3, 4)	Lack of evidence of associations with outcomes (2)	Practical considerations will depend on the specific measure
SUMMARY	Income and education are promising measures. Dual eligibility/Medicaid status is also an available measure of resources available for goods and services to support health and health care capturing elements of income and wealth and is thus a crude proxy for SEP. Wealth is also promising, but collecting accurate data especially at the ends of the distribution is currently difficult. Occupation is conceptually strong, but measuring occupation in the United States poses substantial practical challenges.			
Race, Ethnicity, and Cultural Context				
Race and ethnicity	Social categories that are dimensions of society’s stratification system by which resources, risks, and rewards are distributed; capture a range of health-relevant dimensions related to social disadvantage (e.g., access to social institutions, power/status/material resources, psychosocial exposures), also behavioral norms, sociocultural factors	Has a conceptual relationship with performance indicators used in VBP (1) Has an empirical relationship with performance indicators used in VBP (2) Not a consequence of care (3, 4) Resistant to gaming/manipulation (5)	Refinement of standardized race and ethnicity measures is still needed; there can be substantial heterogeneity within categories (especially Hispanic ethnicity, Asian/Pacific Islander race) (2)	Some existing standards include White House Office of Management and Budget standards and IOM recommendations (IOM, 2009)



Indicator	Definitional Issues	Rationale	Potential Limitations/Challenges	Other Considerations
<b>Language</b>	Typically represents language barriers such as speaking a primary language other than English, having limited English proficiency or otherwise needing interpreter services; can also serve as crude proxy for acculturation	Has a conceptual relationship with performance indicators used in VBP (1) Has an empirical relationship with performance indicators used in VBP (2) Not a consequence of care (3, 4) Resistant to gaming/manipulation (5)		Likely to have important interactions with race and ethnicity
<b>Nativity , immigration history, and acculturation</b>	Includes country of origin (specific country or foreign-born versus U.S.-born), immigration status (including refugee and documentation status), duration in the United States, and measures of acculturation (i.e., the extent to which an individual adheres to the social norms, values, and practices of his own ethnic group or home country or to those of the United States): nativity can be a rough proxy for acculturation	Has a conceptual relationship with performance indicators used in VBP (1) Has an empirical relationship with performance indicators used in VBP (2) Not a consequence of care (3, 4) Resistant to gaming/manipulation (5)	Collecting data on documentation status as an indicator of immigration history may be highly sensitive (2) Measures of acculturation are probably not feasible to collect in the clinical setting, and links to health care outcomes are likely not well established (2)	Likely to have important interactions with race and ethnicity
<b>SUMMARY</b>	<i>Race, ethnicity, language, and nativity are promising measures, particularly in combination. Documentation status as a measure of immigration history is likely to be sensitive to collect. Literature supports a conceptual relationship between acculturation and health care outcomes of interest, but existing measures have limitations and empirical evidence is lacking.</i>			

Indicator	Definitional Issues	Rationale	Potential Limitations/Challenges	Other Considerations
<b>Gender</b>				
<b>Gender (normative)</b>	Represents social dimensions of gender, distinguished from biological effects of sex	Has a conceptual relationship with performance indicators used in VBP (1) Has an empirical relationship with performance indicators used in VBP (2) Not a consequence of care (3, 4) Resistant to gaming/manipulation (5)	Hard to decompose gender effects from biological sex effects (2)	Already included in clinical adjustment
<b>Gender identity (non-conforming)</b>	Includes individuals who identify as transgender, intersex, queer, questioning, and otherwise non-conforming	Has a conceptual relationship with performance indicators used in VBP (1) Present at the start of care (3) Resistant to gaming/manipulation (5)	Lack of empirical evidence and a good existing measure (2) Differential health outcomes may arise from provider–patient encounter (miscommunication, lack of cultural competence, bias (4)	Very low prevalence, unlikely to have a significant effect in adjustment models: CMS is piloting measures for sexual orientation that could be revisited for potential inclusion when there is more data
<b>Sexual orientation</b>	Includes individuals who identify as lesbian, gay, bisexual, queer, questioning	Has a conceptual relationship with performance indicators used in VBP (1) Present at the start of care (3) Resistant to gaming/manipulation (5)	Lack of empirical evidence and a good existing measure (2) Differential health outcomes may arise from provider–patient encounter (miscommunication, lack of cultural competence, bias (4)	CMS is piloting measures for sexual orientation that could be revisited for potential inclusion when there is more data

Indicator	Definitional Issues	Rationale	Potential Limitations/Challenges	Other Considerations
<b>SUMMARY</b>	<i>Normative gender identity (men and women) is promising, but already included in clinical risk adjustment models. Gender identity and sexual orientation could be revisited when there are better measures and data. However, in the short term, prevalence of individuals who have a non-conforming gender identity is likely to be low and thus not substantially affect adjustments.</i>			
Social Relationships				
<b>Marital/ partnership status</b>	Foundational structural element of social relationships; often considered an important indicator of social support	Has a conceptual relationship with performance indicators used in VBP (1) Has an empirical relationship with performance indicators used in VBP (2) Not a consequence of care (3, 4) Resistant to gaming/manipulation (5)	Potentially susceptible to rapid changes (3)	
<b>Living alone</b>	Structural element of social relationships, typically an indicator of social isolation or loneliness in health care and health services research	Has a conceptual relationship with performance indicators used in VBP (1) Has an empirical relationship with performance indicators used in VBP (2) Not a consequence of care (3, 4) Resistant to gaming/manipulation (5)	Potentially susceptible to rapid changes (3) Changes in living status (positive or negative) may result from health care interactions (3, 4)	Unlikely to vary across reporting units substantially, but there may be specific geographic regions with substantially higher prevalence of older adults living alone; may be important to measure with regional interactions (9)

Indicator	Definitional Issues	Rationale	Potential Limitations/Challenges	Other Considerations
Emotional and instrumental social support	Key function of social relationships, includes emotional elements (e.g., through caring and concern) as well as instrumental components (i.e., material and other practical support)	Has a conceptual relationship with performance indicators used in VBP (1) Has an empirical relationship with performance indicators used in VBP (2) Not a consequence of care (3, 4) Resistant to gaming/manipulation (5)	Measuring social support can be challenging (2) Potentially susceptible to rapid changes (3) Changes in social status (positive or negative) may result from health care interactions (3, 4)	
SUMMARY	Marital/partnership status and living arrangements (living alone) are feasible to measure and may at least partly capture social support elements. Emotional and instrumental social support are strongly related to health care outcomes; some measures exist, but because they are multidimensional and causal mechanisms are poorly understood, measuring social support can be difficult both conceptually and practically.			
Residential and Community Context				
Compositional characteristics	Includes dimensions of SEP, the proportion of racial and ethnic minority residents, foreign-born residents, single parent households, English language proficient residents, either individually or in composite (e.g., in a summary neighborhood deprivation measure)	Has a conceptual relationship with performance indicators used in VBP (1) Has an empirical relationship with performance indicators used in VBP (2) Not a consequence of care (3, 4) Resistant to gaming/manipulation (5)	Can be a messy measure: When used as a proxy for individual-level effects, may also pick up area-level effects (1)	Can be used as proxy for individual characteristics or as area-level measure; can be assessed using individual characteristics or as a composite

Indicator	Definitional Issues	Rationale	Potential Limitations/Challenges	Other Considerations
<b>Environmental measures</b>	Dimensions of residential environments including the physical environment (e.g., housing, walkability, transportation options, and proximity to services) and social environments (e.g., safety and violence, social disorder, presence of social organizations, and social cohesion)	Has a conceptual relationship with performance indicators used in VBP (1) Not a consequence of care (3, 4) Resistant to gaming/manipulation (5)	Lack of evidence, but potentially easy to measure/collect (2) Measures need to be tested further (8)	Effects are small (at population level, may be unlikely to rise above SEP)
<b>Urbanicity</b>	Describes where a place (of an individual's residence) falls on the spectrum from urban to rural	Has a conceptual relationship with performance indicators used in VBP (1) Has an empirical relationship with performance indicators used in VBP (2) Not a consequence of care (3, 4) Resistant to gaming/manipulation (5)	Some potential measurement challenges; need to measure at the appropriate size to avoid misclassification (2)	
<b>Housing</b>	Health-relevant dimensions of housing include housing insecurity, homelessness, and quality and safety.	Has a conceptual relationship with performance indicators used in VBP (1) Resistant to gaming/manipulation (5)	Lack of evidence (2) Potentially susceptible to (rapid) changes as a consequence of a health event (3) Potentially a characteristic of care (4) Measures need to be tested further (2)	

Indicator	Definitional Issues	Rationale	Potential Limitations/Challenges	Other Considerations
<b>SUMMARY</b>	<i>A measure of Census-tract neighborhood deprivation is likely good proxy for a range of individual-level and true area-level constructs relevant to outcomes of interest and feasible to obtain. Environmental measures are an area of emerging research that could be revisited when there is more empirical evidence and better measures. Measures of urbanicity and housing are also available.</i>			
Health Literacy				
<b>Health literacy (and numeracy)</b>	Health literacy is the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions; numeracy describes the ability to understand information presented in mathematical terms and to use mathematical knowledge and skills in a variety of applications across a variety of settings	Has a conceptual relationship with performance indicators used in VBP (1) Has an empirical relationship with performance indicators used in VBP (2) Resistant to gaming/manipulation (5)	Validated measures exist, but may be burdensome to collect (2) Malleable in individuals and can be improved as a consequence of the quality of care provided (3) Providers can act upon to ameliorate effects; thus, potentially a characteristic of care (4)	Health literacy and numeracy are outcomes of social risk factors (like SEP, language)
<b>SUMMARY</b>	<i>Health literacy is the result of social risk factors and the effects of low literacy can be mitigated via actions that are squarely within the purview of the health care system. Thus, risk adjustment is likely to reduce incentives to tailor care to or improve patients' health literacy.</i>			



After applying the selection criteria to indicators of the five social risk factors and health literacy, the committee made the following conclusions:

*Conclusion 2: There are measurable social risk factors that could be accounted for in Medicare value-based payment programs in the short-term. Indicators include:*

- *Income, education, and dual-eligibility;*
- *Race, ethnicity, language, and nativity;*
- *Marital/partnership status and living alone; and*
- *Neighborhood deprivation, urbanicity, and housing.*

*Conclusion 3: There are some indicators of social risk factors that capture the basic underlying constructs and currently present practical challenges, but they are worth attention for potential inclusion in accounting methods in Medicare value-based payment programs in the longer term. These include:*

- *Wealth,*
- *Acculturation,*
- *Gender identity and sexual orientation,*
- *Emotional and instrumental social support, and*
- *Environmental measures of residential and community context.*

## IMPLEMENTATION CONSIDERATIONS

The committee applied selection criteria to each social risk factor and relevant indicators of these factors individually. However, as discussed in the previous chapter, the goal is to identify a set of measures that perform well together. To that end, a combination of measures might perform differently than the sum of its parts. Additionally, some social risk factors may have regional interactions. For example, as previously described, living alone may not vary substantially across reporting units except in certain communities with exceptionally high proportions of older adults living alone. Furthermore, as discussed with regard to measures of neighborhood deprivation and indicators of social support, proxy measures may cover multiple indicators. Finally, as described in Chapter 2, the committee expects the relationships between social risk factors and health and health care outcomes to change over time. Thus, it will be important to continuously evaluate the individual risk factors, indicators, and measures as well as the overall set of measures over time. These are empirical issues to test and apply when using real data.

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## 4

## Methods to Account for Social Risk Factors in Medicare Value-Based Payment

When developing and selecting methods to account for social risk factors in Medicare quality measurement and payment applications, understanding the type of incentive design is important in evaluating the potential benefits and challenges of various accounting methods. The incentive design will interact with the method used to account for social risk factor(s) and produce certain potential harms. Selecting the appropriate method (or, methods) to account for social risk factors will require weighing these potential harms. Given that the Medicare payment landscape is evolving and the Centers for Medicare & Medicaid Services (CMS) is moving toward more comprehensive population-based alternative payment models (APMs), the committee developed methods that could apply to any Medicare quality measurement and/or payment program, not just the existing ones. The chapter begins with a brief review of the current Medicare payment landscape, with a focus on capitated payments to Medicare Advantage (also known as Medicare Part C) and Medicare Part D plans and on value-based payment (VBP) programs that tie payment to performance in traditional Medicare and Medicare Advantage, and the planned developments. The chapter proceeds with describing the potential benefits and harms of the status quo (not accounting for social risk factors) and compares them to the potential benefits and harms of accounting for social risk factors generally. The chapter then proposes alternative methods for accounting for social risk factors. The chapter closes with guidance on an approach to applying the methods to achieve simultaneous goals of reducing disparities in access, quality, and outcomes; quality improvement and efficient care delivery for all patients; fair and accurate public reporting; and compensating providers fairly.

### INCENTIVE DESIGN IN MEDICARE PAYMENT PROGRAMS

The Patient Protection and Affordable Care Act of 2010 (ACA), and subsequent legislation such as the Improving Medicare Post-Acute Care Transformations (IMPACT) Act of 2014 and the Medicare and CHIP Reauthorization Act of 2015 (MACRA) require CMS to implement VBP programs. VBP aims to align payment and care delivery goals to improve health care quality and outcomes, while also controlling costs (Rosenthal, 2008). Together these reforms shift focus from delivery of and payment for individual services to a system that focuses

on population health management and holds providers accountable for both quality and cost (McGinnis, 2016; Rajkumar et al., 2014).

In addition to congressionally mandated requirements to implement VBP programs, in 2015, Secretary of Health and Human Services (HHS) Sylvia Burwell announced a goal for CMS to have 30 percent of Medicare payments in alternative payment models by the end of 2016 and 50 percent by the end of 2018, as well as to have 85 percent of Medicare payments tied to quality or value by 2016 and 90 percent by 2018 (Burwell, 2015). As described in the committee's first report, CMS currently administers eight VBP programs and has two in planning (NASEM, 2016a). Additionally, CMS is continually developing and reorganizing more VBP programs, and the Center for Medicare & Medicaid Innovation (CMMI) also tests innovative payment models.

CMS payment models cover a spectrum of approaches from traditional fee-for-service to population-based payment models. As described in Chapter 1 and in the committee's first report, VBP models fall into two broad categories, which the committee roughly categorizes as financial incentives and APMs (NASEM, 2016a). Financial incentives such as pay-for-performance programs link financial bonuses and/or penalties to quality or value (NASEM, 2016a). APMs include episode-based payments and population-based (global) payments, shifting greater financial risk to providers to hold them accountable for the quality and efficiency of care they provide, as well as health outcomes achieved (NASEM, 2016a). Additionally, although not considered entirely VBP models nor do they classify strictly as financial incentives or APMs, Medicare Advantage and Part D have design features that tie quality and cost performance to payment, and thus are relevant for purposes of accounting for social risk factors in payment. They also include risk sharing that necessitates consideration of risk adjustment for the capitation amount or global spending target or may include VBP mechanisms such as bonus payments. Moreover, the study sponsor, the Office of the Assistant Secretary for Planning and Evaluation of HHS, included Medicare Advantage and Medicare Part D as relevant payment models in its presentation to the committee at the first meeting (Epstein, 2015). CMS VBP programs and their specific incentive designs are described briefly below.

### **Current Financial Incentive Programs**

#### *Penalties for Poor Performance*

**Hospital-Acquired Condition Payment Reduction Program** Implemented beginning fiscal year (FY) 2015, the Hospital-Acquired Condition Payment Reduction Program reduces payments to acute care hospitals paid under the Inpatient Prospective Payment System based on their performance on select hospital-acquired condition quality measures, including the Agency for Healthcare Research and Quality Patient Safety Indicator 90 and the Centers for Disease Control and Prevention (CDC) National Healthcare Safety Network infection measures. The bottom 25 percent worst performing hospitals receive a payment reduction of 1 percent for all discharges in those hospitals.

**Hospital Readmission Reductions Program** Begun in 2012, the Hospital Readmission Reductions Program (HRRP) is a penalty program for acute care hospitals paid under the Inpatient Prospective Payment System. The HRRP requires CMS to reduce a share of the base operating payments to hospitals that have excess readmissions (CMS, 2014b). For FY 2013 and FY 2014, CMS calculated excess readmissions for three conditions: acute myocardial infarction,

heart failure, and pneumonia. In FY 2014, CMS refined the measures to account for planned readmissions, and in FY 2015, the program was expanded to include excess readmission from chronic obstructive pulmonary disease and total hip arthroplasty or total knee arthroplasty. The program further expanded to include coronary artery bypass graft surgery for FY 2017 (HHS, 2014; NASEM, 2016a). For FY 2013, the maximum reduction was 1 percent of the hospital's base operating payment; for FY 2014, the maximum reduction was 2 percent; and in FY 2015, the maximum reduction was 3 percent (CMS, 2014b). For FY 2016, the maximum reduction remains 3 percent (HHS, 2014; NASEM, 2016a).

### *Rewards and Penalties for Performance*

**Hospital Value-Based Purchasing Program** The Hospital Value-Based Purchasing Program is the only Medicare hospital incentive program that offers both rewards and sanctions. Beginning FY 2013, acute care hospitals paid under the Inpatient Prospective Payment System became eligible for rewards and penalties based on performance on quality, patient experience, and efficiency (Medicare spending per beneficiary). Incentives could total up to 1 percent in FY 2013 and increase in 0.25 percent increments annually to 2 percent in FY 2017 and subsequent years (MLN, 2013). The program is a budget neutral program, so total incentive payments must equal the total payment reductions (penalties).

**Physician Value-Based Modifier Program** Required by the ACA and established by CMS beginning in 2015, the Physician Value-Based Modifier is a budget-neutral, pay-for-performance program (CMS, n.d.-d). In this program, physicians can receive incentive payments or penalties based on performance on quality, costs, and patient experiences of care. The program divides physicians into two categories based on whether physicians meet minimum reporting requirements using the Physician Quality Reporting System (category 1) or not (category 2). In category 1, physicians are eligible to receive either upward or downward adjustments based on their performance on quality and costs. Physicians in category 2 are subject to a modifier payment set at a fixed downward adjustment (1 percent in 2015 and 2 percent in 2016). Because the program is budget-neutral, total upward adjustments for category 1 must equal total downward adjustments for categories 1 and 2 combined.

## **Current Alternative Payment Models**

### *APM with Downside Risk: End-Stage Renal Disease Quality Improvement Program*

The Medicare Improvements for Patients and Providers Act (MIPPA) of 2008 authorized the End Stage Renal Disease (ESRD) Quality Improvement Program. MIPPA requires CMS to reduce payments to outpatient dialysis facilities treating ESRD patients based on the clinical measures that assess a facility's performance and reporting measures (i.e., whether facilities have met reporting requirements) (CMS, 2015a). Beginning in 2012, CMS reduced the bundled payment rate to ESRD facilities with poor performance by up to 2 percent. To determine penalties, CMS first calculates both an achievement and improvement score for each clinical measure (except the CDC National Healthcare Safety Network Bloodstream Infection in Hemodialysis Outpatients measure, which receives only an achievement score) (CMS, 2014a). Facilities that meet a minimum total performance score receive full payment, while those that fall under this threshold are subject to a reduction between 0.5 percent and 2.0 percent (CMS, 2014a, n.d.-a).

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*APM with Upside Gainsharing and Downside Risk*

**Medicare Shared Savings Program** The Medicare Shared Savings Program (MSSP) is a key provision of the ACA that establishes accountable care organizations (ACOs), a payment and delivery system model that aims to motivate better care coordination, better quality care, and more efficient care through payment reforms (CMS, 2015d). CMS is phasing in the program with two tracks: a one-sided model (shared savings only) and a two-sided model (shared savings and losses). Before each performance year, CMS calculates a risk-adjusted, historical benchmark for per-beneficiary costs. At the end of each performance period, CMS compares the actual spending of each MSSP ACO to the calculated benchmark. Organizations that meet a minimum saving threshold qualify for shared savings, while those that meet a minimum loss threshold must share losses.

**Other Current Value-Based Payment Models and Mechanisms***Medicare Advantage/Part C Bonus Payments*

Medicare Advantage is the insurance program that covers Part A (inpatient care) and Part B (outpatient care) benefits, typically offers Part D prescription drug coverage, and may also offer additional benefits and services for additional cost (MedPAC, 2015a). For beneficiaries enrolled in MA plans (30 percent of all Medicare beneficiaries in 2015), CMS pays MA plans an annual capitated rate based on national and regional historical benchmarks that are risk adjusted using the CMS hierarchical condition category model. MA plans that achieve higher quality ratings under Medicare's Five Star Quality Rating System are also eligible for quality bonus payments. In 2016, these bonus payments equal 5 percent of the county-level rate per beneficiary.

*Part D*

Medicare Part D is a pharmaceutical drug reimbursement program administered by CMS and run by Medicare-approved private insurance plans. CMS pays these plans in several ways, including direct subsidies, low-income subsidies for cost sharing and premiums (costs above the direct subsidy an enrollee otherwise pays for out of pocket), and two risk-sharing mechanisms: individual reinsurance and risk corridor adjustments. Through individual reinsurance, Medicare subsidizes 80 percent of drug spending above an out-of-pocket threshold (enrollee costs including the deductible and cost sharing, also known as the catastrophic cap), while the insurance plan pays 15 percent and the enrollee pays 5 percent (Medicare.gov, n.d.; MedPAC, 2014). Risk corridor adjustment limits plans' potential gains or losses by financing costs that are higher than expected and recouping profits deemed excessive (MedPAC, 2015b). CMS calculates risk corridor adjustments at the end of each benefit year, comparing the plan's actual costs to its bid. Up to 5 percent above or below the bid, plans keep all profits and losses. Between 5 and 10 percent above or below the bid, plan share half of savings and losses with Medicare. Above or below 10 percent, Medicare covers 80 percent of the risk and plans are at risk of 20 percent.

## Future and Developing Value-Based Payment Programs

### *Home Health Value-Based Purchasing*

In its calendar year 2016 Home Health Prospective Payment Final Rule, CMS proposed a home health value-based purchasing model that would subject home health agencies to upward or downward payment adjustments based on quality and efficiency measures (HHS, 2015). CMS randomly selected nine states (Arizona, Florida, Iowa, Maryland, Massachusetts, Nebraska, North Carolina, Tennessee, and Washington) representing nine regional groups for model participation beginning January 1, 2016. CMS requires all home health agencies within the states to participate. Beginning in 2016, CMS assesses and reports performance. CMS proposed implementing payment adjustments beginning in 2018, with proposed maximum adjustments increasing incrementally from 3 percent in 2018, 5 percent in 2019, 6 percent in 2020, 7 percent in 2021, and 8 percent in 2022 (HHS, 2015). CMS proposed payment adjustment scoring using both achievement and improvement scores (HHS, 2015).

### *Skilled Nursing Facility Value-Based Purchasing*

The Protecting Access to Medicare Act of 2014 authorizes a skilled nursing facility incentive program and also specifies details about quality measures, scoring performance, the performance standards and periods, and public reporting (CMS, n.d.-c). Beginning in 2016, CMS will measure performance on the Skilled Nursing Facility 30-Day All-Cause Readmission Measure (CMS, n.d.-c). CMS will also send skilled nursing facilities feedback reports on their performance beginning in the summer of 2016 and quarterly thereafter, and CMS will publish post-performance data publicly on Nursing Home Compare starting in October 2016. Beginning in 2018 (FY 2019), Skilled Nursing Facilities (SNFs), defined broadly as any institution that primarily provides skilled nursing or rehabilitative services, will receive incentive payments based on the quality of care they provide. CMS submitted a report to Congress detailing their implementation plan and has proposed several incentive design options, including paying for attainment, paying for improvement, and a hybrid attainment and improvement model (HHS, 2012).

### *The Medicare and the Children's Health Insurance Program Reauthorization Act*

Among other provisions, MACRA streamlines current public reporting programs and incentivizes the development and uptake of VBP models through establishment of a new Merit-Based Incentive Payment System (MIPS) and incentive payments for participation in certain APMs (Conway et al., 2015). In 2019, quality incentive programs including the Physician Value-Based Modifier, the Physician Quality Reporting System, and the Medicare Electronic Health Records Incentive Program (also known as the Meaningful Use program) will end. MIPS will combine these separate programs into a single initiative. MIPS requires the Secretary of HHS to develop a composite performance score that combines performance on each of four weighted categories: quality, resource use, meaningful use, and clinical practice improvement activities (CMS, 2015b). Based on this score, providers may receive an upward or downward adjustment, or no adjustment. Maximum adjustments will be 4 percent in 2019, 5 percent in 2020, 7 percent in 2021, and 9 percent from 2022 forward (CMS, 2015b). From 2019 to 2024, the highest



performers will also receive an additional payment adjustment. The program is budget neutral, so total upward adjustments must equal total downward adjustments.

MACRA encourages provider participation in APMs through incentive payments. Qualifying participants are excluded from MIPS payment adjustments and instead receive a lump sum equaling 5 percent of the preceding year's estimated total Part B expenditures (CMS, n.d.-b; Conway et al., 2015). To qualify for these payments, in 2019 and 2020, qualifying participants must have 25 percent of their payments or patients through an eligible payment entity (CMS, n.d.-b). In 2021 and 2022, the threshold increases to 50 percent of payments or patients and in 2023 and subsequent years, the threshold rises to 75 percent. In early 2016, CMS identified 10 APMs, including MSSP (described above) and several innovative models such as Next Generation ACOs and Bundled Payment Care Improvement, described in the following section (CMS, 2016e).

### Select Innovative Payment Models

CMMI designs and tests innovative payment and care deliver models. Three such payment models that tie payment to quality and efficiency of care delivered to Medicare beneficiaries, and thus for which accounting for social risk factors may be relevant, are described below.

#### *Bundled Payment Care Improvement*

The Bundled Payments for Care Improvement (BPCI) initiative incentivizes coordinated, efficient, and high quality care across clinicians and care settings by linking payments for clinical services related to a single episode of care (Press et al., 2016). BPCI tests four types of bundled payments (Press et al., 2016). In model 1, the episode of care includes all diagnostic-related groups for the duration of an inpatient stay at an acute care hospital (CMS, 2016a). The first cohort of model 1 began in April 2013 and concluded in March 2016; the remaining participants conclude in December 2016. In models 2, 3, and 4, participating providers choose the episode of care for one or more of 48 conditions as well as the duration of the episode (hospitalization and related readmissions only, hospitalization and postacute care up to 90 days, or postacute care up to 90 days only) (Press et al., 2016). The elected duration determines the model (CMS, 2016a). Although the payment methodology varies somewhat by model, in each, Medicare compares actual costs to a target bundled rate. Providers whose actual costs are under the target can keep savings, while those with costs over the target must compensate Medicare for the difference (Froimson et al., 2013). As of April 1, 2016, more than 1,500 health care providers were participating in BPCI Phase 2, including 681 skilled nursing facilities, 385 acute care hospitals, 283 physician group practices, 99 home health agencies, 9 inpatient rehabilitation facilities, and 1 long-term care hospital (CMS, 2016a).

#### *Advanced APMs*

**Next Generation ACOs** Next Generation ACOs build on experience from earlier ACO models such as the MSSP described above and Pioneer ACOs.<sup>1</sup> These Next Generation ACOs offer a

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<sup>1</sup> The Pioneer ACO Model is a CMMI accountable care initiative with higher levels of savings and risk compared to MSSP, which also allows eligible participants to elect to move from fee-for-service to a population-based payment

range of payment mechanisms from fee-for-service to capitation (referred to in the model as all-inclusive population-based payments), which allow participating organizations to take on substantially more financial risk—up to 100 percent (CMS, 2016d; HHS, 2016). This provides the participating organizations with the potential to share a greater proportion of savings, although this also puts the organizations at greater financial risk for losses. Also unlike previous models, CMS will calculate a prospective (rather than retrospective) benchmark, and participating organizations receive a prospective budget (i.e., before the performance year) (HHS, 2016). The Next Generation ACOs also include a set of delivery system tools to enhance beneficiary engagement. These include potential reward payments to beneficiaries for receiving care through the ACO and affiliated providers and increased access to care coordination services, such as access to telehealth, postdischarge home visits, and skilled nursing facility services, among others (CMS, 2016d). In 2016, 21 organizations are participating in the model (HHS, 2016).

**Comprehensive Primary Care Plus** The Comprehensive Primary Care Plus (CPC+) model is a regionally based, advanced primary care medical home model comprising multipayer payment reform and delivery system reforms that build on the existing Comprehensive Primary Care initiative (Ayanian and Hamel, 2016; Dale et al., 2016). With respect to care delivery, participants meet a series of incremental requirements to achieve five functions: access and continuity, care management stratified by patient risk, preventive care and planned care for chronic conditions, patient and caregiver engagement, and coordinated and comprehensive care (CMS, 2016c; Sessums et al., 2016). For practices with more experience delivering advanced primary care, CPC+ has a separate track that requires these providers to provide additional services, such as identifying psychosocial needs of patients with complex needs and providing resources and other supports to meet those needs (Sessums et al., 2016). To facilitate this care delivery, CPC+ aligns payment, claims and feedback provision, and quality measures across commercial and public payers in a given region (Sessums et al., 2016). CPC+ also includes several payment mechanisms including a prospective monthly care management fee, performance-based incentive payments, and, for track 2 (experienced) models, an upfront comprehensive primary care payment for evaluation and management (CMS, 2016c). CMS also aims to aggregate cost and utility data across all payers as well as to convene health information technology vendors to facilitate providing data and tools to participants to inform practice redesign and quality improvement (Sessums et al., 2016). CMS expects to select up to 5,000 practices in 20 regions to begin a 5-year model in January 2017 (CMS, 2016b; Sessums et al., 2016).

## POTENTIAL HARMS OF THE STATUS QUO COMPARED TO ACCOUNTING FOR SOCIAL RISK FACTORS

Although adjustment for social risk factors could have important benefits, any proposal to account for social risk factors in Medicare payment programs will entail its own advantages and disadvantages that need to be carefully considered. Current Medicare VBP programs that do not

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model (prospective per beneficiary per month payment) in the third year of participation (CMS, 2016). CMS also requires Pioneer ACOs to cover at least 15,000 beneficiaries (5,000 for rural ACOs) and encourages them to negotiate VBP arrangements with other payers by the second year of participation. See <https://innovation.cms.gov/initiatives/Pioneer-ACO-Model/Pioneer-ACO-FAQs.html> (accessed May 19, 2016).

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account for social risk factors could result in tangible harms to populations with social risk factors and to the providers who serve them (Friedberg et al., 2010; Gilman et al., 2015; Joynt and Jha, 2013). Patients with social risk factors may require more intensive care and greater costs to overcome barriers they face to achieving the same health outcomes as patients with fewer risks. By not accounting for the greater cost of caring for these patients, existing payment systems may contribute to disparities in access and quality of care (Joynt and Rosenthal, 2012; Woolhandler and Himmelstein, 2015).

Under current APMs, physicians and hospitals that disproportionately care for socially at-risk populations receive payments that may undervalue the resources and effort required to provide high-quality care for these individuals (Chien et al., 2007). Similarly, it may be difficult for even dedicated providers who disproportionately care for socially at-risk populations (including safety-net providers, minority-serving institutions, critical access hospitals, and community health centers) to gain (or not lose) revenue under quality incentive schemes (e.g., pay-for-performance), because it can be more costly to help patients with social risk factors achieve quality benchmarks (Joynt et al., 2014).

When providers who disproportionately serve patients with social risk factors lose revenue, quality of care and access for patients could decline (Chien et al., 2007; Cunningham et al., 2008; Greal, 2014; Ryan, 2013; Volpp et al., 2006). In the short term, these providers may be required to limit staffing or reduce the variety of services provided to patients with social risk factors (Lindrooth et al., 2006). Over the longer term, revenue shortfalls could contribute to financial distress for providers and to the closure of hospitals, clinics, and physician offices in underserved communities (Kane et al., 2012; Lipstein and Dunagan, 2014). These closures, in turn, would make it difficult for patients with social risk factors to access care in their communities, contributing to delays in use of clinically beneficial treatments (Bazzoli et al., 2012; Buchmueller et al., 2006; Walker et al., 2011).

Similarly, payments to insurance plans that do not account for social risk factors could lead insurers to avoid covering underserved populations. For example, as described in the previous section, Medicare Advantage plans receive a risk-adjusted annual capitated rate and receive bonuses for achieving quality benchmarks based on performance measures risk adjusted for clinical, behavioral, and some social risk factors under the Five-Star Quality Rating System. However, even after adjustment, plans that have a large number of individuals with social risk factors find it more difficult to achieve the benchmarks because these individuals have lower adherence and greater difficulty managing illnesses, making it difficult for the insurer to obtain star ratings comparable to other plans (Young et al., 2014). In response, plans could decide to withdraw from insurance markets in which populations with social risk factors reside (Chien et al., 2007). When insurers leave markets, this has the effect of diminishing choice and competition, leading to potentially higher premiums for beneficiaries (Gaynor and Town, 2011). VBP could also reduce incentives for hospitals to care for socially at-risk populations if penalties are larger than hospitals' margins to care for these patients (Joynt and Jha, 2013).

Finally, under the status quo, plans and providers that serve mixed populations that include individuals with both low and high levels of social risk factors may find that they have incentives to improve care only for patients with low levels of social risk factors (Casalino et al., 2007). For example, to reach a target rate for hemoglobin A1C control among diabetic patients, a physician practice may find it is less costly to focus on improving care for patients that have access to better quality diets and who are more easily able to attend regular checkup visits. As a

result, those patients with greater social risk factors may not receive effective interventions available to patients with better social and economic resources.

In summary, the status quo has disadvantages that include incentives for providers and insurers to avoid serving patients with social risk factors, underpayment to providers who disproportionately serve socially at-risk populations, and underinvestment in quality of care. While proposals that do account for social risk factors would likely diminish these harms, there are also some potential ways in which accounting for social risk factors could incrementally introduce new harms.

First, incentives to improve the quality of care for patients with social risk factors could be diluted under some approaches that adjust for social risk factors. Setting lower benchmarks for patients with social risk factors relative to those without social risk factors can, in some circumstances, diminish provider incentives to exceed the established benchmarks. This could be problematic in settings where providers are capable of delivering the same standard of care for patients with and without social risk factors.

Second, any method for accounting for social risk factors that sets lower-quality improvement benchmarks for patients with social risk factors or otherwise holds providers and insurers to different standards for these populations can have a negative symbolic value. While certainly not intended, these adjustments may create the perception that patients with social risk factors are entitled to a lower quality of care. These perceptions are particularly acute because of a well-documented history of exclusion and inequitable treatment in health care settings of racial and ethnic minorities and low-income populations (HealthyPeople.gov, 2016; IOM, 2003). Even if these concerns are unfounded, perceptions of inequitable treatment can further erode trust in the health care system among patients with social risk factors.

Third, adjustment for social risk factors will not necessarily help patients find providers who will deliver the best quality of care for them. For example, star ratings are intended to guide patients to providers who provide an excellent average quality of care to patients. When only one single summary measure of quality is created for a provider or plan (such as a star rating), unadjusted results convey information about providers' unadjusted performance for their whole patient population, which varies across reporting units. Adding social risk factors to existing risk-adjustment methods may provide more accurate information about the relative performance across reporting units if they were faced with an average patient. However, neither summary score provides information about which provider is better for a patient based on his or her level of social risk factors unless all providers are equally good or bad with all patients. This may be especially true when patients with social risk factors comprise a small number of patients in a practice. Only stratification by social risk factors will reveal such insights.

Finally, some methods of accounting for social risk factors could obscure differences due to poor quality care, such as failure to tailor care or provide culturally competent care, which may result in uneven relative allocation of rewards relative to effort.

*Conclusion 4: It is possible to improve on the status quo with regard to the effect of value-based payment on patients with social risk factors. However, it is also important to minimize potential harms to these patients and to monitor the effect of any specific approach to accounting for social risk factors to ensure the absence of any unanticipated adverse effects on health disparities.*

## METHODS TO ACCOUNT FOR SOCIAL RISK FACTORS IN VALUE-BASED PAYMENT PROGRAMS

Any approach chosen to account for social risk factors should aim to minimize the potential harms described in the previous section. In particular, accounting for social risk factors, especially adjustment, is not intended to obscure disparities that do exist. Disparities should be brought to light, and the payment system should be sure to include sufficient incentive for quality improvement for both socially at-risk populations and for patients overall. Hence, the use of these factors in quality measurement and payment schemes should not disincentivize providers from doing all they can to overcome the influence of these factors on outcomes. Incentivizing providers to find strategies to overcome barriers to better outcomes in socially at-risk populations is critical to the reduction of health disparities. At the same time, incentivizing quality improvement and efficient care for all patients is an important goal of including social risk factors in VBP. Finally, achieving good outcomes (or improving outcomes over time) may be more difficult for providers caring for patients with social risk factors precisely because the influence of some social risk factors on health care outcomes is beyond provider control. Similarly, achieving good outcomes may also be more costly for providers caring for patients with social risk factors owing to additional costs required to tailor care appropriately or because these patients have fewer resources outside the health systems available to contribute to outcomes. Accounting for these factors in performance measurement and payment mechanisms under VBP would level the playing field by ensuring that provider compensation is commensurate with the true quality of care they deliver (i.e., fair and accurate). Thus, the committee's review of methods to account for social risk factors in Medicare VBP programs takes as the point of departure that the goal of Medicare payment and reporting systems are reducing disparities in health care access, affordability, quality, and outcomes; quality improvement and efficient care delivery for all patients; fair and accurate public reporting; and compensating providers for the services they provide.

Observed differences in quality by social risk factors may reflect a combination of drivers, including:

- Mechanisms that occur during the patient–provider encounter (e.g., inadequate tailoring of care to account for social risk factors, discrimination and bias);
- Provider characteristics such as having fewer financial resources (e.g., lower margins, historically lower reimbursement rates) and having fewer and lower-quality clinical/health care resources (e.g., fewer technological resources and lower information technology capacity, fewer and less qualified clinicians);
- Differences in patient preferences; and
- Barriers to access and financial constraints for disadvantaged persons (NASEM, 2016b).

In practice these mechanisms may occur simultaneously and also interact; it is difficult if not impossible to decompose observed differences into these components quantitatively. The committee therefore proposes approaches that do not require disentangling the mechanisms of these multiple pathways for social risk factors.<sup>2</sup> The fact that some units (e.g., providers) do well

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<sup>2</sup> These mechanisms describe direct effects of social risk factors on performance indicators used in VBP. Some effects may be mediated by health status and therefore at least partly accounted for in clinical adjustments. At the



with socially at-risk populations does not imply that it is equally easy to do so on average, and such population differences may also affect the relationship between provider quality and observed provider scores. The standard for taking such factors into account should not be that it is impossible to provide optimal care, but that it is more difficult on average. Taking such factors into account need not “adjust away” disparities. Lower levels of performance for any group should not be considered sufficient or qualify a provider to receive maximum rewards. However, a provider that does not achieve performance on par with top performers (i.e., optimal care) could still be eligible for some reward because, for example, it improved substantially relative to its own benchmark.

*Conclusion 5: Characteristics of a public reporting and payment system that could accomplish the goals of reducing disparities in access, quality, and outcomes; quality improvement and efficient care delivery for all patients; fair and accurate public reporting; and compensating providers fairly include:*

1. *Transparency and accountability for overall performance and performance with respect to socially at-risk members of the population;*
2. *Accurate performance measurement—with high reliability and without bias (systematic error) related to differences in populations served;*
3. *Incentives for improvement overall and for socially at-risk groups, both within reporting units (i.e., the provider setting that is being evaluated—hospitals, health plans, etc.) and between reporting units.*

The committee reviewed literature on a range of methods to account for social risk factors in public reporting and payment systems for which inclusion of social risk factors may be appropriate, with the aim to be more inclusive. These methods are described briefly in the following text and in more detail in Table 4-1.

**Finding:** The committee identified four categories—(A) public reporting; (B) adjustment of performance measure scores; (C) direct adjustment of payments; and (D) restructuring payment incentive design—encompassing ten methods to account for social risk factors in that could be used to address policy goals of reducing disparities in access, quality, and outcomes; quality improvement and efficient care delivery for all patients; fair and accurate public reporting; and compensating providers fairly.

Public reporting seeks to make overall quality visible—to consumers, providers, payers, and regulators (IOM, 2007). It may lead to quality improvement via reputation incentives, and particularly when linked to behavioral nudges, by increasing market share (i.e., influencing choice of provider) for higher-quality reporting units (IOM, 2007). Public reporting methods that could be used to account for social risk factors include (1) stratification by patient characteristics within reporting units (i.e., for population subgroups by social risk factors) and (2) stratification by reporting unit characteristics (i.e., comparisons to peers, such as those with a similar share of low-income patients). (Methods are described in more detail in Table 4-1.) If publicly reported

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same time, social risk factors may also capture unmeasured differences in clinical risk and are likely to have independent effects on performance indicators used in VBP. Evidence described in Chapter 3 includes documented associations of social risk factors on performance indicators used in VBP above and beyond effects of social risk factors on health status. The committee’s approaches do not require disentangling pathways mediated through health status.



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performance is stratified by indicators of social risk, public reporting can also be important for monitoring disparities, particularly when applied together with risk and or payment adjustment.

Adjusting performance measure scores seeks to “level the playing field,” to estimate true reporting-unit quality—that which would occur if all units had the population average patient. As described in Chapter 2, social risk factors can be considered confounders of true performance if they are beyond provider control and unevenly distributed across units and thereby distort (bias) comparisons. Adjustment is a means to account for social risk factors statistically in an effort to more accurately measure true performance. Methods include:

1. risk adjustment for mean within-provider differences (e.g., to account for the average disparity between population subgroups with high and low level of social risk factors);
2. risk adjustment of performance data for within- and between-provider differences (e.g., to account for all patient-level differences in performance associated with social risk factors); and
3. adding quality measures tailored (and only meaningful) to socially at-risk groups in addition to overall performance. Applicable statistical methods may include linear or logistic regression with or without mixed effects, doubly robust estimation, and direct and indirect standardization (Elliott et al., 2001, 2009a,b; Lyratzopoulos et al., 2012; Zaslavsky and Jha, 2015; Zaslavsky et al., 2001).

Any effects of risk adjustment on payment are indirect and require consideration of the particular form of the payment function.

VBP incorporates explicit or implicit (as in the case of bundled or global payment including shared savings) rewards or penalties based on performance on quality and/or cost of care. This can be achieved through three underlying conceptual approaches. First, payers could pay for more to those that are doing a better job in the measurement period (i.e., pay for achievement). Second, payers could pay for the mix of patients the reporting unit treats, that is, pay more to those that treat greater numbers of socially at-risk patients under the assumption that they simply need more resources. This approach lacks incentives to improve unless some other system for accountability is superimposed. Third, payers could pay for improvement, that is, pay more to those who improve to a greater degree.

The committee also expands upon how VBP could incorporate measures of social risk factors. Payments could be directly adjusted using social risk factors, or incentive design could be restructured. Direct adjustments of payment explicitly use measures of social risk factors, but by themselves do not affect performance measure scores. Methods include (1) risk adjustment in the payment formula without adjusting measured performance (i.e., applying a different payment threshold or increment for rewards or sanctions based on the reporting unit’s mix of social risk factors), or (2) stratification of benchmarks used for payment (i.e., applying payment multipliers to reporting-unit strata based on social risk factors). Restructuring payment incentive designs do not explicitly use measures of social risk factors, but implicitly account for social risk factors. Methods include (1) paying for improvement (rather than attainment), (2) downweighting social-risk factor-sensitive measures in payment (i.e., weighting measures differentially in the payment formula to alter their importance to providers), or (3) adding a bonus for achieving low disparities.

Table 4-1 summarizes the four categories of methods that could be used individually or in combination to account for social risk factors in Medicare value-based purchasing programs. The table also lists the possible methods within each category described briefly above and describes

them in more detail along with prerequisites or optimal conditions for implementation, as well as potential advantages and disadvantages. Because considerations for cost performance may differ compared to quality performance, the table also notes special concerns for cost-related incentive programs, including bundled and global payment.

**TABLE 4-1** Methods to Account for Social Risk Factors in Medicare VBP Programs

Method	Description	Prerequisites/Optimal Conditions	Potential Advantages	Potential Disadvantages	Special Considerations for Cost
<b>A. Public Reporting Methods</b> <i>Stratification by itself does not influence payment, but reporting may influence choice or provider, leverage reputational incentives, and/or be important for monitoring disparities in conjunction with methods B and/or C.</i>					
<b>1. Stratification by patient characteristics within reporting units<sup>a</sup></b>	Present performance data for population subgroups. <sup>b</sup>	<p>Social risk factors can be represented by discrete strata (e.g., high and low income, Black and white patients).</p> <p>Works best if there are only a few key dimensions and few interactions among dimensions or reporting will become complex.</p> <p>Requires sufficient sample sizes.</p>	<p>All data can be seen.</p> <p>Disparities can be monitored.</p> <p>High and low performers for at-risk groups visible.</p>	Too many dimensions or strata may lead to ambiguity and information overload.	Interpretation of cost differences for at-risk population complicated by demand effects: patients with higher income consume more services all else equal either due to income effects, price effects for un/under-insured or access constraints for those receiving Medicaid. Likewise, other characteristics of patients with more social risk factors such as low educational attainment, may cause under-use of services relative to need.

<sup>a</sup> Casalino et al., 2007; Martino et al., 2013; NQF, 2014; Price et al., 2015.<sup>b</sup> See, for example, <https://www.cms.gov/About-CMS/Agency-Information/OMH/Downloads/National-Level-Results.pdf> (accessed June 9, 2016).

Method	Description	Prerequisites/Optimal Conditions	Potential Advantages	Potential Disadvantages	Special Considerations for Cost
<b>2. Stratification by reporting unit characteristics<sup>c</sup> (e.g., safety-net hospitals)</b>	Present performance data for subsets of reporting units (e.g., reporting quality performance separately for physicians located in Health Provider Shortage Areas).	Requires a meaningful method of classifying providers, hospitals, or health plans according to the population they serve.	Comparisons made within peer groups: different types of providers and health plans have different capabilities for attaining and improving performance owing to patient differences and resource constraints.  Stratification at the unit level requires only unit-level data (characterization of the unit rather than each patient contributing to performance data).	Does not illuminate within reporting unit differences (for example, differences due to quality compared to those due to patient mix), which might also be important.  Reporting units could try to manipulate their patient mix in order to change strata. “Notch” effects are possible, and units near a notch may especially distort their behavior. Finally, the correlation between the mix of social risk factors and resource constraints may be limited.	
<p align="center"><b>B. Adjustment of performance measure scores<sup>d</sup></b></p> <p align="center"><i>Seeks to improve measurement and estimate provider quality under similar patient populations. Any effects on payment are indirect and one must consider the particular form of the payment function.</i></p>					
<b>1. Risk adjustment for mean within provider differences<sup>e</sup></b>	Statistical methods are used to account for (remove) the average disparity	Social risk factors can be measured at the patient level.  Mean within-provider	Scores improve with improvement in care to any group.  Avoids adjusting for “true”	Effects on payment may be limited. Depending on payment functions, could reduce incentives to improve.	Adjustment will typically increase estimated costs for at risk populations. Unclear interpretation

<sup>c</sup> Casalino et al., 2007; MedPAC, 2013; NQF, 2014.<sup>d</sup> Examples of applicable statistical methods: linear or logistic regression with or without mixed effects, doubly robust estimation, indirect and direct standardization (Elliott et al., 2001, 2009a,b; Lyratzopoulos et al., 2012; Zaslavsky and Jha, 2015; Zaslavsky et al., 2001).<sup>e</sup> Casalino et al., 2007.

Method	Description	Prerequisites/Optimal Conditions	Potential Advantages	Potential Disadvantages	Special Considerations for Cost
	between high- and low-social risk factor groups.	differences represent what is typically achievable.	<p>between-differences in quality.</p> <p>May reduce disincentives to avoid patients with social risk factors compared to no adjustment.</p> <p>Better quality measurement may better focus “nudges” into better plans to reduce between-plan SES disparities.</p>	<p>Under-adjusts if between-provider differences are caused by patient characteristics.</p> <p>Does not make disparities visible without also using method (A).</p> <p>Does not allow unit-level adjusters.</p>	of disparity.
<b>2.Risk adjustment of performance data for within- and between-provider differences</b>	Statistical methods are used to account for (remove) all differences in performance associated with social risk factors at the patient level.	<p>Social risk factors can be measured at the patient level.</p> <p>Providers have little control over either social risk factors or their impact on performance.</p> <p>There is no true difference in the quality of providers seen by those with and without social risk factors.</p>	<p>May capture full effects of social risk factors on quality measures if caring for at-risk patients reduces quality via resources or some similar mechanism.</p> <p>Allows unit-level adjusters.</p>	<p>Depending on payment functions, could reduce incentives to improvement.</p> <p>Does not make disparities visible without also using method (A).</p>	<p>Adjustment will typically increase estimated costs for at risk populations.</p> <p>Unclear interpretation of resulting performance estimates.</p>

Method	Description	Prerequisites/Optimal Conditions	Potential Advantages	Potential Disadvantages	Special Considerations for Cost
<b>3. Add quality measures for performance for at-risk groups in addition to overall measure relates to A1</b>	Tailors performance data to target populations through measures that are only meaningful for target populations.	Adequate sample sizes in at-risk groups.	Fewer model assumptions than adjusted models; direct measure of performance for at-risk groups.	Will not be available for all units—how to pay then? How much to pay relative to overall score?  May be strongly correlated with overall performance.	
<b>C. Direct Adjustment of Payments</b> <i>By themselves do not affect performance measure scores</i>					
<b>1. Risk adjustment in payment formula without adjusting measured performance<sup>f</sup></b> <i>Approach may be based on B(1) or B(2) methods; magnitude might be calibrated to less or more than the indirect effect via</i>	Alter the payment threshold or increment of bonus/penalty based on mix of social risk factors—specifically increase the ROI for improving performance for at-risk populations.	<p>Social risk factors (social risk factors) can be measured at the patient level.</p> <p>Social risk factors result in differential cost of improvement that needs to be compensated for equal “incentive” or the value of improvement is greater for at-risk populations.</p>	<p>Resources are allocated in a manner more favorable to institutions serving at-risk populations.</p> <p>Improvement in care for at-risk populations is differentially rewarded. Magnitude of adjustment can be directly controlled.</p>	<p>Does not improve the accuracy of publicly reported quality measures.</p> <p>Providers/health plans can be rewarded despite poor outcomes/performance.</p>	Adjustment will typically reduce payments associated with at-risk populations through bundled, global or shared savings mechanisms. Such adjustment would freeze in place patterns of use known to be reflective of underuse at least for some services.

<sup>f</sup> CMS, 2015c.



Method	Description	Prerequisites/Optimal Conditions	Potential Advantages	Potential Disadvantages	Special Considerations for Cost
<i>measurement</i>					
<b>2. Stratification of benchmarks used for payment<sup>g</sup></b>	First determine payments according to any pay-for-performance approach, including the current one. Second, select reporting unit strata based on social risk factors. Third, multiply payments by factors that result in equal mean payouts for each stratum (as in A2).	Meaningful strata of social risk factors exist (high and low income, safety-net versus other, AMC versus community). Not too many strata. Social risk factors and their consequences are beyond the control of provider/health plan.	Comparisons are possible across a wider range—stretch goals may be more apparent, while ensuring that resource allocation does not punish institutions that serve at-risk groups. Incentives may strengthen for at-risk groups.	For payment if benchmarks are stratified, the number of social risk factor dimensions would be limited. Incentives may weaken for groups not at risk.  Reporting units could try to manipulate their patient mix in order to change strata. “Notch” effects are possible, and units near a notch may especially distort their behavior. Finally, the correlation between the mix of social risk factors and resource constraints may be limited.	Adjustment will typically increase payments associated with at-risk populations.
<p style="text-align: center;"><b>D. Restructure Payment Incentive Design</b>  <i>Measures of Social Risk Factors Not <u>Explicitly</u> Used but Implicitly Accounted For</i></p>					

<sup>g</sup> Damberg et al., 2015.

Method	Description	Prerequisites/Optimal Conditions	Potential Advantages	Potential Disadvantages	Special Considerations for Cost
<b>1. Pay for improvement relative to own benchmark (to a greater extent or exclusively), including “growth models”<sup>h</sup></b>	Payment formula is based in part or wholly based on percentage improvement relative to prior period rather than absolute level of performance.	Good measurement of prior performance of well-defined unit (how to handle mergers, etc.).	Strongly controls for unobserved social risk factors. Clear incentives for improvement.	<p>Does not explicitly recognize absolute level of performance.</p> <p>No guarantee that providers disproportionately serving socially at-risk populations are more likely to achieve improvement compared to achievement targets (though they do in some work in progress).</p> <p>Do you ratchet-improve vs. best ever or do you allow rewards for alternation?</p> <p>How to handle ceiling effects (high-performing units that may have little room to improve during the performance period) is unclear.</p> <p>Depends on functional form of both the payment formula and the effort required to improve from different baselines.</p>	Rewards units that have high baseline costs where improvement is more feasible.

<sup>h</sup> The Medicare Advantage and Hospital Value Based Purchasing payment arrangements currently include a measure of improvement (or failure rate reduction) in their payment formula (CMS, 2012). The committee lists this approach here to acknowledge the benefits and risks of such an approach vis à vis accounting for social risk factors in other Medicare payment systems. The committee also notes that increasing the weight given to improvement or altering the particular approach to scoring improvement (e.g., in terms of absolute improvement versus failure rate reduction for Hospital Value Based Purchasing) is a method open to CMS for obtaining a different balance of incentives in programs that currently incorporate improvement (Casalino et al., 2007; Rosenthal et al., 2004).

Method	Description	Prerequisites/Optimal Conditions	Potential Advantages	Potential Disadvantages	Special Considerations for Cost
<b>2. Downweight social risk factor-sensitive measures in payment</b>	In payment formula measures can be weighted differentially to alter their importance to providers	<p>Some quality measures – like readmissions and intermediate outcomes – are strongly associated with social risk factors</p> <p>Some performance measures—like inpatient safety measures – can be expected to have little relationship to social risk factors.</p> <p>Ideally, the measures not affected by social risk factors signal high quality/value overall.</p>	May reallocate resources appropriately without providing incentives to cherry pick patients.	<p>Measuring improvement is noisier than comparing performance to a fixed (achievement) benchmark—particularly for rare events like mortality.</p> <p>Does not improve quality measurement.</p> <p>Social risk factor-sensitive measures may be important dimensions of quality that are not picked up by social risk factor-insensitive ones.</p>	

Method	Description	Prerequisites/Optimal Conditions	Potential Advantages	Potential Disadvantages	Special Considerations for Cost
<b>3. Add bonus for low disparities<sup>i</sup></b>	In addition to other rewards and penalties explicitly measure and reward the magnitude of difference between groups.	Adequate sample sizes in low-risk and high-risk groups.	Directly rewards equity.	Requires other components to address improvement or overall level of performance.  Disparity could be reduced by making better off group worse unless steps are taken to avoid this.	Might reward cost increases for at-risk populations that may or may not be warranted.

<sup>i</sup> In simple linear scoring, this is equivalent to giving greater than proportional weight to performance with the high risk (H) group relative to the low risk (L) group. If FL, FH is fraction in the groups ( $FL + FH = 1$ ), Y = mean performance in a group (YL, YH), then the proportionally weighted score is  $FL*YL + FH*YH$  with a linear penalty on disparity  $YL - YH$ , the score is  $FL*YL + FH*YH - C*(YL - YH) = (FL - C)*YL + (FH + C)*YH$  (Blustein et al., 2011; Casalino et al., 2007).

APPLYING METHODS TO ACCOUNT FOR SOCIAL RISK FACTORS

In many cases, methods from multiple categories can be used together. In some cases, multiple methods from a single category can be used in combination. In this respect, each approach has some advantages and disadvantages and a combination of approaches may yield a better result than any one method alone. As described in the previous section, the committee underscores that the benefits and harms of any single or composite method of accounting for social risk factors should be assessed in reference to the status quo or some other feasible alternative rather than a perfect world in which social risk factors do not confound efforts to improve the quality and efficiency of health care delivery (referred to by some as a “full information” scenario). As illustrations, Table 4-2 compares the potential harms of accounting for social risk factors relative to the status quo. Box 4-1 describes a hypothetical example of stratification by social risk factors and a simple risk adjustment of a performance measure for mean within-provider differences between groups with high and low levels of social risk factors. This example also describes potential advantages and disadvantages of this approach relative to the status quo (no adjustment for social risk factors).

*Conclusion 6: To achieve goals of reducing disparities in access, quality, and outcomes; quality improvement and efficient care delivery for all patients; fair and accurate public reporting; and compensating providers fairly, a combination of reporting and accounting in both measures and payment are needed.*

TABLE 4-2 Potential Harms of Accounting for Social Risk Factors Compared to the Status Quo

Status Quo	Accounting for Social Risk Factors
Patient dumping/avoidance	Reduces this risk relative to the status quo
Unfair to providers disproportionately serving socially at-risk populations (if factors beyond provider control—and/or the cost of improvement is higher for populations with social risk factors—causes poor performance)	Unfair to providers who provide high quality care to all patients if truly poor quality causes poorer performance for socially at-risk patients
Will reduce quality and access for socially at-risk populations	Reduces this risk relative to the status quo
Incentives to improve care might favor focusing on patients with few social risk factors if they are easier to improve	Same unless payment is adjusted upward for socially at-risk populations

BOX 4-1

Example: Stratification by Social Risk Factors and Simple Adjustment of a Quality Measure to Reflect Varying Levels of Social Risk Factors Across Providers

This example shows the calculation of a hypothetical adjusted quality measure. The quality measure is represented as a percentage and can be thought of as the proportion of a

population receiving quality care or achieving a good outcome. The adjustment process increases the score of the providers serving greater-than-average numbers of patients with social risk factors and decreases the score for providers serving lower-than-average numbers of patients with social risk factors.

For the sake of simplicity, all three providers in this example have the same total number of patients. Patients are either high risk or low risk, and each provider has a different proportion of high-risk patients (20, 40, or 80 percent in Providers A, B, and C, respectively). As shown in Table 1, the “national” average is 46.7 percent at high risk.

**TABLE 1 Patient Mix Across Providers**

	High Level of Social Risk Factors	Lower Level of Social Risk Factors	Total Patients	% High-Risk
Provider A	20	80	100	20.0%
Provider B	40	60	100	40.0%
Provider C	80	20	100	80.0%
“National”	140	160	300	46.7%

Table 2 presents the unadjusted overall score for each provider and nationally, as well as scores stratified by patients’ level of social risk. Here, each provider performs better for the lower social risk group than for the disadvantaged group with more social risk factors. Each provider’s unadjusted overall score is equal to the average of the scores for the two groups, weighted by the number of patients in each group.

**TABLE 2 Stratification and Adjustment of Quality Scores**

	Stratification by Social Risk Factor Level Within Reporting Units			Risk Adjustment for Mean Within-Provider Differences		
	Quality Score for High-Risk Group	Quality Score for Lower-Risk Group	Unadjusted Overall Score	Within- Provider Difference Low Risk/High Risk	Adjustment	Adjusted Score
Provider A	70.0%	82.0%	79.6%	–12.0%	3.3%	76.3%
Provider B	60.0%	70.0%	66.0%	–10.0%	0.8%	65.2%
Provider C	65.0%	80.0%	68.0%	–15.0%	4.1%	72.1%
“National”	64.3%	77.3%	71.2%	–12.3%		71.2%

The last row of Table 2 shows the “national” scores. The national average difference in scores between the high-risk group and the lower-risk group is –13.0% (64.3% – 77.3%). Some of this difference is a between-provider difference, reflecting the greater concentration of high-risk patients in lower-performing providers. The average within-provider difference is –



12.3 percent, meaning that on average, a given provider achieves scores for high-risk patients that are 12.3 percentage points worse than those for low-risk patients. In this example adjustment is based on this average within-provider difference in scores. Specifically, a provider's unadjusted score is increased or decreased by product of (a) this average within-provider difference, (b) the amount by which the provider's proportion of high-risk patients exceeds or falls short of the national average, and (b)  $-1$ . The adjustment for each provider is listed in the column second from the right. For Provider A this is equal to  $-12.3\% \times (20.0\% - 46.7\%) \times (-1) = -3.3$  percent.

Each provider's score and the national score adjusted for this national average (mean within provider) difference is listed in the far right column. Provider C, which has a larger-than-average proportion of high-risk patients, sees its score increase through adjustment. Provider B, which is close to the national average in its proportion of high-risk patients sees a very small adjustment. Provider A, which delivers the highest-quality care to both groups, has a modest downward adjustment that reflects it is smaller than average proportion of high-risk patients. Importantly, however, with this adjustment process in place, Provider A does not have a reason to limit service to the high risk group for fear of adversely affecting its quality score and ranking. Overall, the adjustment also has the property that increasing quality for either low- or high-risk patients increases a provider's adjusted score to the same extent.

Under a value-based payment system, these providers might receive bonuses or penalties proportional to quality scores or might be eligible for shared savings only if they exceed a quality threshold. In the current world in which such scores are adjusted in some instances for clinical risk factors, but not social risk factors, all of these providers have incentives to limit their service to patients at high social risk. In addition, those with above average share of high risk patients are financially penalized for the poorer process or outcomes measures which may perpetuate a perverse cycle of under-reimbursement for patients that might require extra resources to treat. With an adjustment system such as the one in this example in place, that incentive is removed and the providers can improve their scores by improving care delivered to the high-risk group, low-risk group, or both.

Finally, it is important to note that the stratified scores by group also convey important information that patients may deserve. In particular, patients in the high risk group might want to know which providers deliver the highest-quality care to patients like themselves. Thus, regardless of the adjustment system used, making providers' adjusted scores and scores by patient group available to consumers may inform their choices of provider.

Considerations around the trade-offs of various methods of accounting for social risk factors are different for cost-related performance compared to quality performance. Costs in the context of VBP can refer to the costs of improving quality or achieving good outcomes for socially at-risk patient or to the cost of care billed to a payer. As noted earlier, because achieving high performance on performance indicators used in VBP may require greater investments on the part of health care providers and health plans to overcome barriers socially at-risk populations face, costs to achieve good outcomes and improve care quality for socially at-risk populations are likely to be higher than costs to achieve the same outcomes and improve care quality for more advantaged patients. Because at least some of these costs will be outside of the services that can be billed to payers like CMS, as described in an earlier section, a potential harm of not

accounting for social risk factors in a VBP environment is that this increased cost may be a disincentive to care for socially at-risk populations. On the other hand, lower resource use observed in billed costs of care may reflect unmet need or barriers to access rather than the absence of waste. Thus, lower cost is not always better; whereas, higher quality is always better.

*Conclusion 7: Strategies to account for social risk factors for measures of cost and efficiency may differ from strategies for quality measurement, because observed lower resource use may reflect unmet need rather than the absence of waste, and thus lower cost is not always better, while higher quality is always better.*

## MONITORING METHODS TO ACCOUNT FOR SOCIAL RISK FACTORS

As described earlier in the chapter, accounting for social risk factors in Medicare value-based purchasing programs is intended to achieve a balance between incentives for reducing disparities in access, quality, and outcomes; quality improvement and efficient care delivery for all patients; fair and accurate public reporting; and compensating providers fairly. Both the status quo and any new approach to accounting for social risk factors will have uncertain trade-offs in terms of these goals—many unknowable factors including provider and patient beliefs and behavioral responses will affect the results that any new system yields. Monitoring data on a variety of indicators will facilitate assessment of the effects of existing and new programs on potential unintended adverse effects. Such indicators might include enrollment (for health plans), patient complaints, access to and quality of care for socially at-risk populations, and the financial sustainability of providers disproportionately caring for socially at-risk populations.

*Conclusion 8: Any specific approach to accounting for social risk factors in Medicare quality and payment programs requires continuous monitoring with respect to the goals of reducing disparities in access, quality, and outcomes; quality improvement and efficient care delivery for all patients; fair and accurate public reporting; and compensating providers fairly.*

Finally, because behavioral and other responses to new systems may change the balance of risks and benefits over time, to take into account these behavioral and other responses, the specific approach to accounting for social risk factors may need to be reassessed.

## CONCLUDING REMARKS

The committee notes that it is not within its statement of task to recommend whether social risk factors should be accounted for in VBP or how; that decision sits elsewhere. The committee hopes that the conclusions in this report help CMS and the Secretary of HHS make that important decision. In the next report, the committee tackles the question of how to gather the data that could be used to account for social risk factors in Medicare VBP.

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## Appendix A

### Criteria for Selecting Risk Factors Reviewed by the Committee

When developing the criteria that could be used to select social risk factors that should be accounted for in Medicare value-based payment programs, the committee reviewed existing criteria for selecting risk factors for risk adjustment models from the literature. These include criteria, principles, and other guidance from:

- Centers for Medicare & Medicaid Services Hierarchical Condition Categories (CMS-HCC) model for risk adjustment of Medicare capitation payments (Pope et al., 2004);
- Consumer Assessment of Healthcare Providers and Systems (CAHPS) Hospital Survey case-mix adjustment (Elliott et al., 2009; O'Malley et al., 2005);
- Department of Health and Human Services (HHS)-HCC risk adjustment model for individual and small group markets under the Affordable Care Act (Kautter et al., 2014); and
- The National Quality Forum 2014 report *Risk Adjustment for Socioeconomic Status or Other Sociodemographic Factors*.

The criteria reviewed are excerpted below.

#### CMS-HCC MODEL CRITERIA

The following 10 principles guided the creation of the diagnostic classification system.

*Principle 1*—Diagnostic categories should be clinically meaningful. Each diagnostic category is a set of ICD-9-CM [International Classification of Diseases, 9th Revision, Clinical Modification] codes (CDC, 2004). These codes should all relate to a reasonably well-specified disease or medical condition that defines the category. Conditions must be sufficiently clinically specific to minimize opportunities for gaming or discretionary coding. Clinical meaningfulness improves the face validity of the classification system to clinicians, its interpretability, and its utility for disease management and quality monitoring.

*Principle 2*—Diagnostic categories should predict medical expenditures. Diagnoses in the same HCC should be reasonably homogeneous with respect to their effect on

both current (this year's) and future (next year's) costs. (In this article we present prospective models predicting future costs.)

*Principle 3*—Diagnostic categories that will affect payments should have adequate sample sizes to permit accurate and stable estimates of expenditures. Diagnostic categories used in establishing payments should have adequate sample sizes in available data sets. Given the extreme skewness of medical expenditure data, the data cannot reliably determine the expected cost of extremely rare diagnostic categories.

*Principle 4*—In creating an individual's clinical profile, hierarchies should be used to characterize the person's illness level within each disease process, while the effects of unrelated disease processes accumulate. Because each new medical problem adds to an individual's total disease burden, unrelated disease processes should increase predicted costs of care. However, the most severe manifestation of a given disease process principally defines its impact on costs. Therefore, related conditions should be treated hierarchically, with more severe manifestations of a condition dominating (and zeroing out the effect of) less serious ones.

*Principle 5*—The diagnostic classification should encourage specific coding. Vague diagnostic codes should be grouped with less severe and lower-paying diagnostic categories to provide incentives for more specific diagnostic coding.

*Principle 6*—The diagnostic classification should not reward coding proliferation. The classification should not measure greater disease burden simply because more ICD-9-CM codes are present. Hence, neither the number of times that a particular code appears, nor the presence of additional, closely related codes that indicate the same condition should increase predicted costs.

*Principle 7*—Providers should not be penalized for recording additional diagnoses (monotonicity). This principle has two consequences for modeling: (1) no condition category should carry a negative payment weight, and (2) a condition that is higher-ranked in a disease hierarchy (causing lower-rank diagnoses to be ignored) should have at least as large a payment weight as lower-ranked conditions in the same hierarchy.

*Principle 8*—The classification system should be internally consistent (transitive). If diagnostic category A is higher-ranked than category B in a disease hierarchy, and category B is higher ranked than category C, then category A should be higher ranked than category C. Transitivity improves the internal consistency of the classification system and ensures that the assignment of diagnostic categories is independent of the order in which hierarchical exclusion rules are applied.

*Principle 9*—The diagnostic classification should assign all ICD-9-CM codes (exhaustive classification). Because each diagnostic code potentially contains relevant clinical information, the classification should categorize all ICD-9-CM codes.

*Principle 10*—Discretionary diagnostic categories should be excluded from payment models. Diagnoses that are particularly subject to intentional or unintentional discretionary coding variation or inappropriate coding by health

plans/providers, or that are not clinically or empirically credible as cost predictors, should not increase cost predictions. Excluding these diagnoses reduces the sensitivity of the model to coding variation, coding proliferation, gaming, and upcoding.

In designing the diagnostic classification, principles 7 (monotonicity), 8 (transitivity), and 9 (exhaustive classification) were followed absolutely. For example, if the expenditure weights for our models did not originally satisfy monotonicity, we imposed constraints to create models that did. Judgment was used to make trade-offs among other principles. For example, clinical meaningfulness (principle 1) is often best served by creating a very large number of detailed clinical groupings. But a large number of groupings conflicts with adequate sample sizes for each category (principle 3). Another trade-off is encouraging specific coding (principle 5) versus predictive power (principle 2). In current coding practice, non-specific codes are common. If these codes are excluded from the classification system, substantial predictive power is sacrificed. Similarly, excluding discretionary codes (principle 10) can also lower predictive power (principle 2). We approached the inherent trade-offs involved in designing a classification system using empirical evidence on frequencies and predictive power, clinical judgment on relatedness, specificity, and severity of diagnoses, and the judgment of the authors on incentives and likely provider responses to the classification system. The DCG [Diagnostic Cost Group]/HCC models balance these competing goals to achieve a feasible health-based payment system (Pope et al., 2004).

### CAHPS CASE-MIX ADJUSTMENT CRITERIA

Our criterion for selection of case-mix adjustors is the “impact factor,” which is the product of two measures: predictive power (the strength of the relationship between the candidate adjustor and the outcome variable at the individual level) and heterogeneity factor (the amount of variation among hospitals in the adjustor variable) (Zaslavsky, 1998). Predictive power quantifies the improvement in model fit ( $R^2$ ) attributable to a variable; unlike tests of statistical significance, it does not depend on sample size. The heterogeneity factor measures the extent to which the characteristic is unevenly distributed across hospitals and therefore potentially a source of bias in comparisons. A variable, such as gender, could be highly predictive of responses but have little impact on case-mix adjustment because its distribution is relatively homogeneous across hospitals. Conversely, a variable could have quite different distributions in different hospitals but be unrelated to the rating. By combining both predictive power and heterogeneity into a single measure, the impact factor is more informative than purely predictive measures such as  $R^2$ ; it approximates the magnitude of the incremental adjustments due to adding a variable to the case-mix model (O’Malley et al., 2005).

Explanatory power (Zaslavsky, 1998) was used to assess the relative importance of individual PMA [patient-mix adjuster] variables to hospital-level adjustment. Explanatory power is the product of two components: (1) the individual predictive

power of a PMA variable (as measured by the improvement in R2 attributable to a candidate predictor) and (2) the hospital-level heterogeneity of a PMA variable (Elliott et al., 2009).

HHS-HCC RISK ADJUSTMENT MODEL CRITERIA

There are 264 HHS-HCCs in the full diagnostic classification, of which a subset is included in the HHS risk adjustment model. The criteria for including HCCs in the model are now described. These criteria were sometimes in conflict and trade-offs had to be made among them in assessing whether to include specific HCCs in the HHS risk adjustment model.

- Criterion 1—Represent clinically significant, well-defined, and costly medical conditions that are likely to be diagnosed, coded, and treated if they are present.
- Criterion 2—Are not especially subject to discretionary diagnostic coding or “diagnostic discovery” (enhanced rates of diagnosis through population screening not motivated by improved quality of care).
- Criterion 3—Do not primarily represent poor quality or avoidable complications of medical care.
- Criterion 4—Identify chronic, predictable, or other conditions that are subject to insurer risk selection, risk segmentation, or provider network selection, rather than random acute events that represent insurance risk.

Following an extensive review process, we selected 127 HHS-HCCs to be included in the HHS risk adjustment model ... Finally, to balance the competing goals of improving predictive power and limiting the influence of discretionary coding, a subset of HHS-HCCs in the risk adjustment model were grouped into larger aggregates, in other words “grouping” clusters of HCCs together as a single condition with a single coefficient that can only be counted once. After grouping, the number of HCC factors included in the model was effectively reduced from 127 to 100 (Kautter et al., 2014).

NATIONAL QUALITY FORUM CRITERIA GUIDELINES FOR SELECTING RISK FACTORS FOR ADJUSTMENT

TABLE A-1 Guidelines for Selecting Risk Factors for Adjustment

Guideline	Rationale	Clinical/ Health Status Factors <sup>a</sup>	SDS Factors <sup>b</sup>
Clinical/conceptual relationship with the outcome of interest	Begin with conceptual model informed by research and experience	✓	✓
Empirical association with the outcome of interest	To confirm conceptual relationship	✓	✓

Guideline	Rationale	Clinical/ Health Status Factors <sup>a</sup>	SDS Factors <sup>b</sup>
Variation in prevalence of the factor across the measured entities	If there is no variation in prevalence across health care units being measured, it will not bias performance results	✓	✓
Not confounded with quality of care, risk factors should:	Trying to isolate effects of quality of care	✓	✓
<ul style="list-style-type: none"> <li>Be present at the start of care and</li> </ul>	Ensures not a result of care provided	✓	✓
<ul style="list-style-type: none"> <li>not an indicator or characteristic of care provided (e.g., treatments, interventions, expertise of staff)</li> </ul>	Although these could explain variation in outcome, in performance measurement the goal is to isolate differences in performance due to differences in the care provided	✓	✓
Resistant to manipulation or gaming—generally, a diagnosis or assessment data (e.g., functional status score) is considered less susceptible to manipulation than a clinical procedure or treatment (e.g., physical therapy)	Ensures validity of performance score as representing quality of care (versus, for example, upcoding)	✓	✓
Accurate data that can be reliably and feasibly captured	Data limitations often represent a practical constraint to what factors are included in risk models	✓	✓
Contribution of unique variation in the outcome (i.e., not redundant or highly correlated with another risk factor)	Prevent overfitting and unstable estimates, or coefficients that appear to be in the wrong direction; reduce data collection burden	✓	✓
Potentially, improvement of the risk model (e.g., risk model metrics of discrimination—i.e., sensitivity/specificity, calibration) and sustained with cross-validation	Change in R-squared or C-statistic may not be significant, but calibration at different deciles of risk might improve. May not appear to be a big change but could represent meaningful differences in terms of the outcome (e.g., lives, dollars). Order of entry into a model may influence this result	✓	✓
Potentially, face validity and acceptability	Some factors may not be indicated empirically, but could improve acceptability—need to weigh against negative impact on model, feasibility and burden of data collection	✓	✓



NOTE: SDS = sociodemographic status.

<sup>a</sup> Examples of clinical and health status factors include comorbidity; severity of illness; patient-reported health status, etc.

<sup>b</sup> Examples of sociodemographic factors include income; education; English language proficiency, etc.

SOURCE: NQF, 2014.

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## Appendix B

### Committee Biosketches

**Donald M. Steinwachs, Ph.D.** (*Chair*), is a professor in the Department of Health Policy and Management at the Johns Hopkins Bloomberg School of Public Health. He is active in the Center for Health Services and Outcomes Research, previously named the Health Services Research and Development Center, where he served as director for many years. His research spans the design and application of health information systems for evaluation and management, development of classification systems and modeling tools, and research on the impact of organization, financing, and quality of care on outcomes for persons with chronic diseases. Dr. Steinwachs was a co-developer of the widely used ACG (Adjusted Clinical Groups) case-mix adjustment and co-developer of the Johns Hopkins HaH (Hospital at Home). He developed methods for measuring provider continuity, needs and unmet needs for care, and measures of the timeliness of care. He was president of the Association for Health Services Research (now AcademyHealth) and received the 2013 Distinguished Research Award from AcademyHealth. He currently serves on the National Research Advisory Council of the Department of Veterans Affairs. He served on numerous committees of the National Academies of Sciences, Engineering, and Medicine, including the Board on Health Care Services and the Committee on Understanding and Eliminating Racial and Ethnic Disparities in Health Care. He holds a Ph.D. from Johns Hopkins University and is an elected member of the National Academy of Medicine.

**John Z. Ayanian, M.D., M.P.P.**, is director of the Institute for Healthcare Policy and Innovation, the Alice Hamilton Professor of Medicine at the School of Medicine, professor of health management and policy at the School of Public Health, and professor of public policy at the Ford School of Public Policy, all at the University of Michigan. He also serves as associate editor of the *New England Journal of Medicine*. Dr. Ayanian has focused his career on health policy and health services research related to access to care, quality of care, and health care disparities, and has served in key health policy advisory roles to state and federal government. Prior to joining the University of Michigan, Dr. Ayanian was a professor at the Harvard Medical School and at the Harvard School of Public Health, and a practicing primary care physician at Brigham and Women's Hospital in Boston. At Harvard, Dr. Ayanian also directed the Health Disparities Research Program of Harvard Catalyst, Harvard's Clinical and Translational Sciences Center; the Outcomes Research Program of the Dana-Farber/Harvard Cancer Center; and the Harvard Medical School Fellowship in General Medicine and Primary Care. In addition to his medical degree from Harvard Medical School, he holds an M.P.P. from Harvard's John F.

Kennedy School of Government. He is an elected member of the National Academy of Medicine.

**Charles Baumgart, M.D.**, is senior medical director at xG Health Solutions, an organization that was spun out of Geisinger Health System, designed to partner with health care organizations nationally to bring Geisinger population health management expertise to local health care improvement efforts. He has worked with numerous health care systems, both academic and community based, as well as with managed care organizations. He has most recently been the xG Health clinical/physician lead for support of a New York Delivery System Reform Incentive Payment program site, the Suffolk County Care Collaborative (Stony Brook University Hospital). Before joining xG Health Solutions, Dr. Baumgart was the Geisinger Health Plan senior medical director for government programs. His responsibilities included the development of the clinical management program for a new Managed Medicaid program in northeast Pennsylvania, leveraging Geisinger's existing Advanced Medical Home model. In his role, he worked with all aspects of population and quality management, including support of medical home development, analytics, and provider pay-for-performance programs. Dr. Baumgart previously served as a senior medical director and then the vice president and chief medical officer for Presbyterian Health Plan in Albuquerque, New Mexico. Dr. Baumgart graduated with an M.D. from the University of Iowa. Dr. Baumgart is board certified in internal medicine and quality assurance and utilization review. He has participated in the advanced training program in health care delivery improvement with Intermountain Healthcare, is a certified managed care executive through America's Health Insurance Plans, and served as a senior examiner with the Malcolm Baldrige National Quality Award Program.

**Melinda Buntin, Ph.D.**, is professor and the chair of the Department of Health Policy at Vanderbilt University's School of Medicine. She previously served as deputy assistant director for health at the Congressional Budget Office (CBO), where she was responsible for managing and directing studies of health care and health care financing issues in the Health, Retirement, and Long-term Analysis Division. Prior to joining CBO, Dr. Buntin worked at the Office of the National Coordinator for Health Information Technology, where she established and directed the economic analysis, evaluation, and modeling group, while on leave from RAND Corporation. At RAND, Dr. Buntin served as deputy director of RAND Health's Economics, Financing, and Organization Program, director of Public Sector Initiatives for RAND Health, and co-director of the Bing Center for Health Economics. Her research at RAND focused on insurance benefit design, health insurance markets, provider payment, and the care use and needs of the elderly. She has a Ph.D. in health policy with a concentration in economics from Harvard University. Dr. Buntin is a member of the National Academies of Sciences, Engineering, and Medicine's Board on Health Care Services.

**Ana V. Diez Roux, M.D., Ph.D., M.P.H.**, is Distinguished University Professor of Epidemiology and dean of the Drexel University Dornsife School of Public Health. Before joining Drexel University, she served on the faculties of Columbia University and the University of Michigan, where she was chair of the Department of Epidemiology and director of the Center for Social Epidemiology and Population Health at the University of Michigan School of Public Health. Dr. Diez Roux is internationally known for her research on the social determinants of population health and the study of how neighborhoods affect health. She has been a member of the MacArthur Network on Socioeconomic Factors and Health and was co-director of the Network on Inequality, Complexity and Health. Dr. Diez Roux received an M.D. from the

University of Buenos Aires and a master's degree in public health and doctorate in health policy and management from the Johns Hopkins Bloomberg School of Public Health. She is an elected member of the National Academy of Medicine and has served on numerous committees of the National Research Council and the Institute of Medicine, most recently on the Committee on Recommended Social and Behavioral Domains and Measures for Electronic Health Records.

**Marc N. Elliott, Ph.D.**, is a senior principal researcher and holds the Distinguished Chair in Statistics at the RAND Corporation. His areas of interest include health disparities, Medicare, vulnerable populations, experiences with health care, profiling of health care institutions, survey sampling, experimental design, causal inference, and case-mix adjustment. He has developed Bayesian methods of estimating race/ethnicity and associated disparities using surname and address information. Dr. Elliott led an Office of Minority Health project, developing novel, cost-effective sampling and analytic methods to improve national health estimates for small racial/ethnic subgroups. Since 2006, he has led the Centers for Medicare & Medicaid Services Medicare CAHPS (Consumer Assessment of Health Providers and Systems) Analysis project. Since 1996, he has been RAND's lead statistician on the Agency for Healthcare Research and Quality (AHRQ) CAHPS I-III projects and currently co-leads the AHRQ CAHPS IV project. Dr. Elliott was recognized by Thomas Reuters as being one of the Top 1 percent of Cited Scientists 2002-2012. Dr. Elliott is a fellow of the American Statistical Association. He earned his Ph.D. in statistics from Rice University.

**José J. Escarce, M.D., Ph.D.**, is a professor of medicine in the David Geffen School of Medicine at the University of California, Los Angeles (UCLA), and a professor of health policy and management in the UCLA Fielding School of Public Health. His research interests and expertise include health economics, managed care, physician behavior, racial/ethnic and socioeconomic disparities in health care, technological change in medicine, and access, costs, and quality of care. Dr. Escarce is currently working on projects that address sociodemographic barriers to access, vertical integration between acute and postacute care, bundled payments, and the effects of financial and nonfinancial incentives on costs and quality in provider groups and health systems. He holds an M.D. from the University of Pennsylvania School of Medicine and a Ph.D. from the Wharton School. Dr. Escarce is an elected member of the National Academy of Medicine and was a member of the Institute of Medicine Committee on Understanding and Eliminating Racial and Ethnic Disparities in Health Care and of the National Academies of Sciences, Engineering, and Medicine's Board on Population Health and Public Health Practice.

**Robert Ferrer, M.D., M.P.H.**, is John M. Smith, Jr. Professor and vice chair for research in the Department of Family and Community Medicine at the University of Texas Health Science Center at San Antonio (UTHSCSA). Dr. Ferrer is a practicing family physician with research interests at the interface of primary care and public health, including primary care transformation and quality improvement, social determinants of health, and applications of complexity science to health and health care. Currently, he also serves as director of community engagement for UTHSCSA's Clinical Translational Science Award. Dr. Ferrer is active in community health initiatives, having served as chair of the leadership team for San Antonio's Communities Putting Prevention to Work grant from the Centers for Disease Control and Prevention and is now vice-chair of the Bexar County Health Collaborative. He has also been a member of the Expert Panel for the Agency for Healthcare Research and Quality Innovations Exchange. Dr. Ferrer holds an M.D. from Hahnemann University School of Medicine and an M.P.H. from the University of Washington.

**Darrell J. Gaskin, Ph.D.**, is William C. and Nancy F. Richardson Professor of Health Policy and director of the Johns Hopkins Center for Health Disparities Solutions, Johns Hopkins Bloomberg School of Public Health. His research aims to improve access to care for poor, minority, and other vulnerable populations and to eliminate racial/ethnic and socioeconomic disparities in health care. His current research explores the relationship between “place” and health care disparities and examines racial/ethnic and socioeconomic disparities in hospital care. He is vice chair of the Board of Directors of AcademyHealth and a member of the Center for Health Policy Development Board and the board of directors for the National Academy of State Health Policy. He has served as a member of the Congressional Black Caucus Commission on the Budget Deficit, Economic Crisis, and Wealth Creation and of the Board of Directors of the Maryland Health Insurance Plan, the state’s high-risk pool, and was vice chair of the Board of Directors of the Maryland Health Benefits Exchange Commission. He has also served as a member of several Institute of Medicine committees, including the Committee on Valuing Community-Based, Non-Clinical Prevention Policies and Wellness Strategies and the Committee on the Future of Emergency Care in the United States Health System. He received an M.S. from the Massachusetts Institute of Technology and a Ph.D. from the Johns Hopkins Bloomberg School of Public Health.

**Mark D. Hayward, Ph.D.**, is Centennial Commission Professor in the Liberal Arts and professor of sociology at the University of Texas at Austin. From 2005 to 2015, he was director of the university’s Population Research Center. His primary research addresses how life course exposures and events influence the morbidity and mortality experiences of the adult population. Recent studies have clarified how early life conditions and especially educational experience influence socioeconomic, race, and gender disparities in adult morbidity and mortality; the demography of race/ethnic and gender disparities in healthy life expectancy; social inequality in the biomarkers of aging; and the health consequences of marriage, divorce, and widowhood. He recently served as the president of the Southern Demographic Association and chair of the Aging and Life Course section of the American Sociological Association. He has served on the boards of the Population Association of America and the Society of Biodemography and Social Biology, and he was a member and then chair of the Inter-University Consortium for Political and Social Research Council. Currently, he is a member of the National Advisory Committee for the Robert Wood Johnson Foundation’s Health and Society Scholars Program. He served on the National Research Council (NRC) Committee on Population and the NRC Panel on New Directions in Social Demography, Social Epidemiology, and the Sociology of Aging. Dr. Hayward received his Ph.D. in sociology from Indiana University.

**James S. Jackson, Ph.D.**, is the past director of the Institute for Social Research and the Daniel Katz Distinguished University Professor of Psychology at the University of Michigan. He has previously held positions as chair of the Social Psychology Training Program and director of the Research Center for Group Dynamics, the Program for Research on Black Americans, and the Center for Afroamerican and African Studies, all at the University of Michigan. His research focuses on issues of racial and ethnic influences on life course development, attitude change, reciprocity, social support, and coping and health among African Americans. His research efforts include carrying out a number of national and international surveys of black populations. Dr. Jackson is a fellow of the American Academy of Arts and Sciences and the American Academy of Political and Social Science, and was appointed to the National Science Board of the United States by President Obama in 2014. He has served on several committees of the National Academies of Sciences, Engineering, and Medicine, including currently on the Board on the



Health of Select Populations; on the Board on Behavioral, Cognitive, and Sensory Sciences; Standing Committee on Integrating New Behavioral Health Measures into the Substance Abuse and Mental Health Services Administration's Data Collection Programs (as chair); and Roundtable on the Application of Social and Behavioral Science Research. Dr. Jackson holds a Ph.D. in social psychology from Wayne State University and is an elected member of the National Academy of Medicine.

**Daniel Polsky, Ph.D.**, is the executive director of the Leonard Davis Institute of Health Economics, Professor of Medicine in the Perelman School of Medicine, and the Robert D. Eilers Professor of Health Care Management in the Wharton School at the University of Pennsylvania. His research areas include access to health care, provider payment, disparities, and economic evaluation of medical and behavioral health interventions. He serves on the Congressional Budget Office's Panel of Health Advisers and the National Academies of Sciences, Engineering, and Medicine's Board on Population Health and Public Health Practice. He was the senior economist on health issues at the President's Council of Economic Advisers in 2007-2008. He received a Ph.D. in Economics from the University of Pennsylvania and a master of public policy from the University of Michigan.

**Meredith Rosenthal, Ph.D.**, is professor of health economics and policy and the associate dean of diversity at the Harvard T.H. Chan School of Public Health. She is a member of the Massachusetts Public Health Council and an elected board chair of the Massachusetts Health Quality Partners. Dr. Rosenthal's research focuses primarily on policies that will help slow the growth in health care spending. These efforts include changes in payment incentives, benefit design, and the provision of information and behavioral "nudges" to both patients and providers. Her research has influenced the design of provider payment systems in both the public and private sectors. She has advised federal and state policy makers in health care payment policy and implementation, and has also testified in congressional hearings on pay-for-performance and in legislative hearings in California and Massachusetts concerning health care provider payment and benefit design policies. Dr. Rosenthal earned her Ph.D. in health policy (economics track) at Harvard. She is an elected member of the National Academy of Medicine.

**Anthony Shih, M.D., M.P.H.**, is executive vice president of The New York Academy of Medicine (NYAM). Established in 1847, NYAM advances solutions that promote the health and well-being of people in cities worldwide. Dr. Shih's expertise is in health care policy, urban health, health system performance measurement, health care quality improvement, and health care philanthropy. Prior to joining NYAM, Dr. Shih served as The Commonwealth Fund's executive vice president for programs, overseeing all of the fund's program and research activities, which were focused on improving the U.S. health care system. Previously, Dr. Shih held several senior management roles, including chief quality officer and vice president of strategy at IPRO, a leading independent, not-for-profit health care quality improvement organization. At IPRO, he developed and managed large-scale quality assessment and improvement projects for Medicare and Medicaid populations, as well as led IPRO's Health Care Transparency Group. Earlier in his career, Dr. Shih was assistant medical director for a community-based mental health organization serving immigrant and refugee populations in Oakland, California. Board-certified in preventive medicine, Dr. Shih received his M.D. from the New York University School of Medicine and his M.P.H. from the Columbia University Mailman School of Public Health.





OFFICE OF  
HEALTH POLICY

# EXECUTIVE SUMMARY

## **Report to Congress: Social Risk Factors and Performance in Medicare's Value-Based Purchasing Program**

The Second of Two Reports Required by the Improving Medicare  
Post-Acute Care Transformation (IMPACT) Act of 2014

March 2020

**U.S. Department of Health & Human Services**

Office of the Assistant Secretary for Planning and Evaluation

# Executive Summary

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## I. Introduction

In recent years, the U.S. Department of Health and Human Services has embraced value-based purchasing (VBP) as a strategy for the Medicare program to achieve greater value for the nation's health dollar, as measured by quality outcomes and cost of care. While definitions of VBP vary, the general policy objectives are to move away from fee-for-service payments, to pay for health care quality versus quantity of services provided, and to incentivize the provision of person-centered, coordinated care. Under these policies, providers<sup>1</sup> that participate in Medicare are held financially accountable for both the cost and quality of health care services. While strong incentives for achieving VBP objectives are critical, it is also important to apply such incentives fairly—that is, to recognize when these incentives place certain providers at a relative disadvantage. In this regard, there has been considerable discussion on whether VBP programs should account for differences in populations between providers and, in particular, whether programs should account for beneficiaries with social risk factors—people for whom factors such as income, housing, social support, transportation, and nutrition might adversely affect access to health services or desired health outcomes.<sup>1-7</sup> The ongoing transition to VBP has been accompanied by growing recognition that to achieve VBP's objectives, the nation's health care delivery system must draw upon social and community services to address social risk factors.<sup>8,9</sup> These services most often are provided by networks of non-profit community-based organizations that have long-standing, trusted relationships across the nation, in both rural and urban communities.

This Report will explore emerging trends among providers who are addressing social risk factors in part by developing linkages with social service and other community-based organizations.

Congress responded to the need to develop high-quality evidence to guide policy decisions about the role of social risk in VBP in part by calling for this Report. Section 2(d) of the Improving Medicare Post-Acute Care Transformation (IMPACT) Act of 2014 (P.L. 113-183) called for the Secretary of Health and Human Services (HHS), acting through the Office of the Assistant Secretary for Planning and Evaluation (ASPE), to conduct a study evaluating the effect of individuals' socioeconomic status (SES) on quality measures and measures of resource use under the Medicare program. The statute requires four components:

- “Study A,”<sup>2</sup> which focused on SES information currently available in Medicare data, and Medicaid eligibility and urban-versus-rural location.<sup>3</sup> Study A introduced the broader concept of social risk factors to replace SES and was submitted as a Report to Congress in December 2016.

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<sup>1</sup> Note that in this Report the term “providers” is used to indicate physicians, hospitals, dialysis facilities, nursing facilities, Medicare Advantage contracts, etc.

<sup>2</sup> The term “Study A” is based on the statutory mandate in section 2(d)(1)(A) of the Improving Medicare Post-Acute Care Transformation (IMPACT) Act of 2014.

<sup>3</sup> Improving Medicare Post-Acute Care Transformation (IMPACT) Act of 2014, Section 2(d)(1)(A)

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- “Study B,” which expands the analyses by using non-Medicare datasets to examine the impact of risk factors on quality resource use, and other measures, is the subject of this Report.<sup>4</sup> Study B was due to the Congress in October 2019.
- An examination of non-Medicare data sources to inform and contextualize Studies A and B focusing on data availability and use.<sup>5</sup> The National Academies of Science, Engineering, and Medicine (NASEM) prepared a set of five reports commissioned by ASPE and released in 2017 on this topic. This Report builds on and extends the NASEM data work.
- Recommendations by the Secretary on 1) how CMS should obtain access to the necessary data on SES (if the data is not already being collected) and how to address barriers to access to the data, and 2) how CMS should account for SES in quality, resource use, and other measures and in payment adjustments based on those measures, if Studies A and B find a relationship between SES and quality and resource use measures.

This Report presents the results of Study B and builds on the framework and considerations introduced in Study A. This Report addresses three policy questions:

1. Should some or all of Medicare’s value-based purchasing programs account for social risk by adjusting measures and/or payment based on those measures?
2. Should HHS routinely collect more extensive and detailed data on beneficiaries’ social risk factors than is currently available?
3. How can HHS achieve better outcomes for all Medicare beneficiaries by facilitating the ability of providers and communities to address social risk factors and integrate health and social services?

The first two policy questions are guided by Congress’ request for Study B. The third policy question furthers HHS’s goal to improve health outcomes for all Medicare beneficiaries. This Report uses both Medicare and non-Medicare data sources to address the policy questions. In addition, this Report outlines policy options that could potentially address social risk factors, and quantifies the impact of these options on providers serving beneficiaries with social risk factors. It also expands on the data findings requested by the Congress in Study C. As required by statute, this Report provides evidence and recommendations related to the issue of accounting for social risk factors in Medicare’s VBP programs specifically. However, since VBP programs are only one part of the larger goal of providing high-value, person-centered care, it also addresses the current state of efforts and future options for more comprehensively addressing and integrating social risk factors within the Medicare program and the broader health care system.

## II. Main Findings

Study A laid out three strategies for accounting for social risk in Medicare’s VBP programs to ensure that all Medicare beneficiaries receive the highest-quality health care services. The findings in this Report reinforce the need for such strategies. Proposed solutions that address only the measures or programs without considering the broader delivery system and policy context are unlikely to mitigate the full

<sup>4</sup> Improving Medicare Post-Acute Care Transformation (IMPACT) Act of 2014, Section 2(d)(1)(B)

<sup>5</sup> Improving Medicare Post-Acute Care Transformation (IMPACT) Act of 2014, Section 2(d)(1)(C)

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implications of the relationship between social risk factors and outcomes. VBP programs need to be leveraged to enhance access to and provision of high-quality care for beneficiaries with social risk factors.

The findings in this Report build on those of Study A, particularly the strategies for accounting for social risk in Medicare's VBP programs (Figure 1.1). The first strategy, "measure and report quality," deals with collecting and using social risk information. The second strategy, "set high, fair quality standards," refers to the use of social risk information in quality and resource use measures and in VBP programs. Finally, "reward and support better outcomes" addresses the need to address beneficiaries' social needs directly.

**Figure 1.1. Strategies for Accounting for Social Risk in Medicare's Value-Based Purchasing Programs**



Looking across the quantitative and qualitative analyses conducted for this Report, the following three main findings emerge.

**A. FINDING 1: Beneficiary social risk information is not routinely or systematically collected across the health care system, and there is not always standardized terminology to capture beneficiary social risk information.**

A prerequisite to measuring and reporting quality for beneficiaries with social risk factors is knowing beneficiaries' social needs. A consistent theme found throughout the qualitative research in this Report was the lack of available information on beneficiaries' social risk. Currently, when individual-level social

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risk information is collected, it may be recorded using one of the many screening tools available and documented in varying locations, including electronic health record (EHR) fields, free text notes, or as diagnoses. This lack of standardization in data collection and documentation makes it difficult to share data meaningfully between providers, payers, and social service organizations.

Despite these limitations, there is broad interest in having information on beneficiaries' social risk. All the EHR vendors included as case studies in this Report are incorporating social risk information into their tools in response to client demand. Additionally, submitters to ASPE's RFI (Request for Information) on provider and health plan approaches to improving care for Medicare beneficiaries with social risk factors discussed the need for standards on social risk data collection to support interoperability.

**B. FINDING 2: After accounting for additional social and functional risk factors, dual-enrollment status remains a powerful predictor of poor outcomes on some quality and resource use measures in Medicare's VBP programs. Functional status is also a powerful predictor of poor outcomes on some measures but is not always included in measure risk adjustment.**

Setting high, fair quality standards for all beneficiaries involves accurately accounting for differences between beneficiaries that may affect health outcomes. This Report evaluated additional individual-level social risk factors available in the Medicare Current Beneficiary Survey (MCBS): marital status, education, language, living alone, income, wealth, and private health insurance. It also included the area-level social risk factors of the social capital index and social deprivation index. When each social risk factor was evaluated separately, all the individual-level social risk factors were associated with higher spending and readmission rates. However, when all of the social risk factors were included together, only a couple were still associated with poor outcomes. Dual enrollment in Medicare and Medicaid was associated with both higher spending and readmissions, and social relationships (not being married or living alone) was associated with higher spending. In the total per capita cost measure (TPCC), dual enrollment was a stronger predictor of higher costs than social relationships—confirming Study A's finding that dual enrollment is the most powerful predictor of poor outcomes among the social risk factors evaluated. This finding points to the need to assess health equity and provide adequate information on providers' performance based on who they serve.

This Report also evaluated the current medical risk-adjustment approaches. It assessed the extent to which unmeasured functional risk factors (defined as physical or cognitive impairments that impair functioning) may contribute to observed worse outcomes among dually enrolled beneficiaries using both claims-based and patient self-reported functional limitations. In most quality and resource use measures evaluated, functional risk was associated with both dual-enrollment status and poor outcomes, indicating that not accounting for functional risk may increase the observed effect of dual-enrollment status.

**C. FINDING 3: Although many organizations are working to improve equity by addressing social risk, which interventions are effective, replicable, and scalable remains unclear due to limited evaluation.**

To reward and support better outcomes for beneficiaries with social risk factors, successful strategies need to be identified and disseminated. Many organizations are working to improve care for beneficiaries

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with social risk factors, but some interventions may be more effective than others. Although many submitters responding to ASPE's RFI described interventions to improve care for these beneficiaries, few of these interventions have been rigorously evaluated. The limited published evidence on the effectiveness and return on investment of certain interventions may be a starting point for organizations looking for new ways to improve care. However, evaluations of more and different types of interventions are still needed, including evidence on whether interventions are effective in different patient populations, across a range of organizations, and scaled to larger or smaller groups.

### III. Recommendations

The recommendations included below build on the framework and considerations introduced in Study A and the policy questions introduced earlier for this Report. Recommendations are required by Congress in the IMPACT Act.

Policy questions:

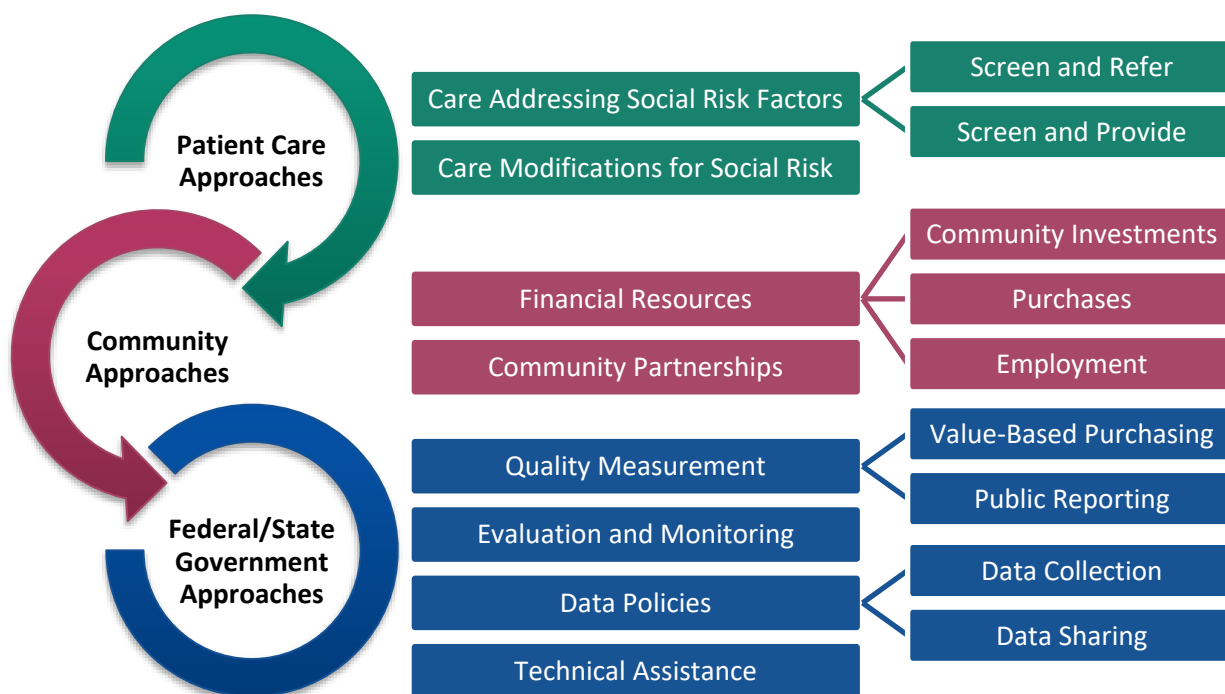
1. Should some or all of Medicare's value-based purchasing programs account for social risk by adjusting measures and/or payment based on those measures?
2. Should HHS routinely collect more extensive and detailed data on beneficiaries' social risk factors than is currently available?
3. How can HHS achieve better outcomes for all Medicare beneficiaries by facilitating the ability of providers and communities to address social risk factors and integrate health and social services?

As discussed in the emerging areas section (Section 3 of this Report), addressing social risk factors and supporting better health outcomes will require connections between every level of the health system and the community (Figure 1.2). Providers can screen for social needs and refer beneficiaries to organizations to address those needs. Social needs may be better addressed through community collaborations, including referral networks and partnerships within and outside the health care system. Payers, including health plans and government agencies, can maintain social risk information about beneficiaries and fund infrastructure development to address social needs. At each of these levels, value-based care is an important tool to align incentives across the health care delivery system to address social needs.



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Figure 1.2. Approaches for Health Care Systems to Invest in Addressing Social Risk



Adapted from: Gottlieb L, Fichtenberg C, Alderwick H, Adler N. Social Determinants of Health: What's a Healthcare System to Do? *Journal of Healthcare Management* 2019;64:243-57. doi:10.1097/jhm-d-18-00160.

#### A. A Comprehensive Strategy to Account for Social Risk in Medicare's VBP Programs

As Medicare's VBP programs mature, it is important to shift from modifying individual programs to adopting and implementing strategies that cut across all programs and health care settings. Quality reporting and VBP programs need to work in concert to create aligned incentives that drive providers to improve health outcomes for all beneficiaries. Thus, the recommendations in this Report apply to *all* of Medicare's quality reporting and VBP programs to create a comprehensive approach to account for social risk.

The recommendations in this Report build on the three-part strategy for accounting for social risk in Medicare's VBP programs (Figure 1.1) introduced in Study A. The strategy lays out a comprehensive approach to move towards programs that incentivize providers and plans to improve health outcomes by rewarding and supporting better outcomes for beneficiaries with social risk factors. This requires measuring and reporting quality by social risk (Strategy 1). Support is also needed to reward and support better outcomes for all beneficiaries, including those with social risk factors (Strategy 3). These two strategies provide support for providers to be held to the same high, fair quality standards for all beneficiaries (Strategy 2). As this strategy is realized, VBP and quality programs will need to align incentives for providers to improve care for socially at-risk beneficiaries. Rather than adjusting quality measures and VBP performance scores for social risk, this strategy focuses on supporting providers in addressing social risk (Strategy 3).

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Although the recommendations are discussed in detail within each of the strategies, they are more likely to be successful if the recommendations across the strategies are implemented together as a comprehensive approach to addressing social risk in Medicare. For example, the recommendations for Strategy 2: Set High, Fair Quality Standards for All Beneficiaries discuss how to account for social risk in VBP measures and programs. The recommendations do not support adjusting outcome measures for social risk factors, nor do they support using peer groups for VBP performance score calculations. However, under the current VBP measures and programs, providers treating more socially at-risk beneficiaries may have worse performance and the recommendations for Strategy 2 alone do not address this disparity. Therefore, this comprehensive strategy directly addresses the disparity in outcomes by providing additional tools and resources to safety-net providers.

Changing VBP quality measures and performance scores alone, without providing incentives to improve health equity or additional tools and resources, is unlikely to improve care for socially at-risk beneficiaries. This comprehensive strategy seeks to respond to the third policy question evaluated in this Report, “How can HHS achieve better outcomes for all Medicare beneficiaries by facilitating the ability of providers and communities to address social risk factors and integrate health and social services?”

However, some of the key components needed to make this comprehensive strategy successful are not yet available. More work is needed to develop both health equity measures to reward providers for improving care for beneficiaries with social needs, as well as VBP payment adjustments and supplemental benefits to support providers’ efforts. Thus, the recommendations across the three strategies need to be implemented in phases.

Some of these recommendations could be implemented soon, while others require more development before implementation can proceed. For example, changes to measures’ medical risk adjustment methodology (Recommendation 2.1) could be implemented in the near future, as the indicators of functional risk assessed in this Report are already available. On the other hand, health equity measures or domains (Recommendations 1.3 and 2.2) are not yet readily available, and measure developers and endorsement organizations need to build such measures before they can be incorporated into VBP programs and replace current transitional approaches such as the categorical adjustment index (CAI). For this reason, implementing some of the recommendations in this Report requires more developmental work so that the Medicare program can implement a comprehensive approach to addressing social risk.

Some recommendations can be implemented alone, while others should be implemented together to achieve the policy goals described above. For instance, efforts to increase the sharing of social risk data across federal agencies and across the health and social service sectors at the local level (Recommendation 1.2) can proceed without the need to wait for other recommendations. On the other hand, implementing Recommendation 2.5 by removing peer grouping from the Hospital Readmissions Reduction Program (HRRP) and the CAI from the Medicare Advantage Star Ratings needs to be implemented along with additional actions to help providers achieve high quality outcomes for all beneficiaries. The goal of implementing these recommendations together is to hold all providers to the same high standards while giving providers additional tools and resources to help achieve these high standards. Additionally, this comprehensive approach calls for enhancing risk adjustment methodologies.

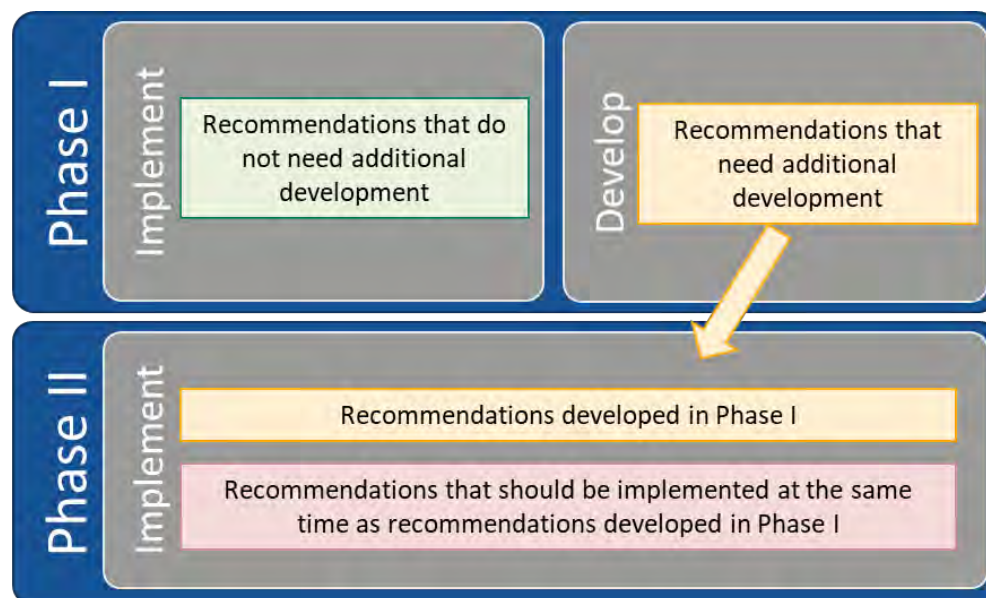
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Without implementing these recommendations together, providers treating more socially at-risk beneficiaries would lose the current protections of peer grouping and the CAI. These actions and tools could include supplemental benefits and additional payment adjustments to providers (Recommendation 3.1), a standard risk adjustment framework that includes functional risk adjustment (Recommendation 2.1), or including health equity measures or domains in VBP programs (Recommendation 2.2). For example, it may be appropriate to remove peer grouping from the HRRP once the readmission measures use the standard risk adjustment framework that includes functional risk adjustment. As actions and tools to help providers achieve high-quality care for all beneficiaries are implemented, their impact on safety-net providers will need to be assessed, and further modifications may be necessary.

For these reasons, the recommendations included in this Report may be implemented in two phases (Figure 1.3).

- Phase 1: recommendations that are ready to be implemented independently in the first phase can begin now.
- Phase 2: recommendations that require further development can then be implemented in the second phase. Some recommendations do not require further development, but should be implemented in phase 2 at the same time as other recommendations that do require development, such as Recommendation 2.5 discussed above. Removal of peer grouping from programs should be implemented in the second phase, after actions and tools to help providers achieve high-quality care for all beneficiaries through one or more of the methods discussed above.

**Figure 1.3. Implementation Phases**



Note: Implementation phases including specific recommendations are presented in the summary section after the detailed recommendations.

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## B. Recommendations

**Strategy 1: Measure and Report Quality for Beneficiaries with Social Risk Factors**

This strategy includes collecting data on social risk and reporting quality measures by patient social risk to guide and encourage providers to identify and address patients' social needs and reduce health disparities. Separately reporting quality measures for those patients with and without social risk will facilitate measuring progress toward closing the gap in performance on quality measures between these two groups of patients.

**Recommendation 1.1: HHS should support and inform the development of data collection and interoperability standards for social risk. CMS should explore ways to encourage providers to collect social risk information.**

This recommendation addresses Congress' requirement that the Secretary make recommendations on obtaining access to social risk data.

Study A included the consideration "Consider enhancing data collection and developing statistical techniques to allow measurement and reporting of performance for beneficiaries with social risk factors on key quality and resource use measures." Since that time, there has been an increased focus on collecting and using beneficiary social risk information. However, there is still no consensus on how the data will be used, an important question that needs to be answered before data collection can be standardized. Deciding how data will be used will help to determine (1) which questions should be asked, and (2) how the responses should be documented. For each of these issues, there are opportunities to provide standards and/or to encourage data collection.

The choice of screening tool determines which questions will be asked. Currently numerous tools are widely used. The ideal screening tool depends on the planned use of social needs information. If the primary goal is to direct beneficiaries to services to address their social needs, providers need more detailed information to make appropriate referrals, implement interventions, and track resolution of needs over time. On the other hand, if social risk is used to risk adjust measures, payments, or population monitoring, less detail may be sufficient. Already, CMS has developed a social risk screening tool used in the Accountable Health Communities model and the social risk items proposed for the post-acute care screening tools.<sup>10,11</sup> These instruments are required for specific programs but could be used more broadly for the Medicare population. Alternatively, HHS could provide standards on which screening tool should be used but allow providers and plans to determine whether or not to use it to collect social risk information.

Knowing who needs information on the beneficiary's social risk also affects how the data should be documented. Here there are also various options worth considering. Currently, as noted earlier, social risk information can be captured in clinical documentation and/or in recording diagnosis codes. The federal government, state government, and health plans can most easily access information documented as a

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diagnosis codes in claims because claims are submitted to the payer for reimbursement. HHS may need additional social risk information for VBP program monitoring and evaluation.

For other health and social service providers, it may be easier to access information from clinical documentation, as providers may be able to share EHR information more easily than they can share claims. Yet if multiple parts of a single health system need the information, provider notes may be sufficient. However, different documentation methods may be ideal for different parts of the health care system. One solution may be to create “crosswalks” to translate social risk information from one format to another. Additionally, EHR captured data and/or diagnosis codes may need to be expanded to allow capture of more detailed social risk information. As with screening tools, HHS could provide standards for data documentation with or without encouraging providers and plans to document social risk factors.

HHS has developed data standards for documentation of some social risk information. The Office of the National Coordinator for Health Information Technology (ONC) included social, psychological, and behavioral standards in the 2015 health information technology certification criteria, providing interoperability standards (LOINC (Logical Observation Identifiers Names and Codes) and SNOMED CT (Systematized Nomenclature of Medicine—Clinical Terms)) for financial strain, education, social connection and isolation, and others.<sup>12</sup> ONC has also released a draft 2020-2025 Federal Health IT Strategic Plan for public comments, including an objective to integrate health and human services information.<sup>13</sup> Additional stakeholder efforts are underway to expand the availability to capture additional social determinants of health data elements for use and exchange. This includes the Gravity Project to identify and harmonize social risk factor data for interoperable electronic health information exchange for EHR fields as well as proposals to expand the ICD-10 (International Classification of Diseases, Tenth Revision) z-codes, the alphanumeric codes used worldwide to represent diagnoses.<sup>14,15</sup>

**Recommendation 1.2: Federal and state agencies should consider policies regarding how and when to share social risk data across agencies. HHS should explore whether some social risk data can/should be shared at the local level between health and social service providers.**

This recommendation addresses Congress’ requirement that the Secretary make recommendations on obtaining access to social risk data.

In addition to, or even before, new social risk information is collected, existing information should be shared to reduce the burden of new data collection. This was discussed in the National Academies of Sciences, Engineering, and Medicine’s (NASEM) report on data sources as well as in the submitted responses to ASPE’s request for information on provider and health plan approaches to improving care for Medicare beneficiaries with social risk factors.<sup>16</sup> The NASEM report specifically identified data elements collected by the Social Security Administration, the Census Bureau, and Centers for Disease Control and Prevention’s (CDC’s) National Center for Health Statistics.

Such data sharing has been promoted by the bipartisan Commission on Evidence-based Policymaking’s report and the Foundations for Evidence-Based Policymaking Act of 2018,<sup>17,18</sup> and these new developments are promising as improvements to the current state, in which sharing and linking data

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across agencies or departments within the federal government can be difficult and burdensome. For example, this Report intended to use Medicare beneficiaries' individual-level responses to the American Community Survey (ACS) and Medicare claims to evaluate the effect of the social risk factors available in the ACS on quality and resource use measures included in Medicare's value-based purchasing (VBP) programs. However, at the time of submission, the merged Medicare-ACS data were not yet available. A standard agreement across federal agencies that addresses confidentiality and security could make such data sharing smoother than the current process that requires each project to create a new agreement from scratch.

Within the Department, efforts have begun to understand the current state of data sharing across agencies, including an evaluation of challenges in doing so in the 2018 report "The State of Data Sharing at the U.S. Department of Health and Human Services" by the HHS's Office of the Chief Technology Officer. As these challenges are addressed to allow data sharing across the Department, the next logical step would be to expand this analysis to additional departments and identify and address challenges in data sharing across the federal, state, and local governments.

Beyond sharing current administrative data, the Department, including ONC, the Office for Civil Rights (OCR)—which enforces the Health Insurance Portability and Accountability Act (HIPAA) Privacy Rule—and the HHS Office of the Chief Technology Officer (CTO), should explore whether and how health and social service providers can share their social risk data. The necessity for and type of data to be shared would depend on the utility of the available data to providers and addressing any data security, privacy, or governance concerns for sharing and documentation. As data needs and uses will depend on the specific health and social service providers involved, these decisions should be made at the local level.

**Recommendation 1.3: Quality reporting programs should include health equity measures.**

This recommendation addresses Congress' requirements that the Secretary make recommendations on accounting for social risk in quality and resource use measures.

This recommendation also mirrors the second consideration in Study A: "Consider developing and introducing health equity measures or domains into existing payment programs to measure disparities and incent a focus on reducing them." Currently, no quality reporting programs explicitly include health equity measures that provide incentives to reduce health disparities. Including health equity measures can help providers prioritize areas for particular focus, and specific measures targeting equity within existing quality reporting programs can motivate a focus on reducing disparities and signal that health equity is an important component of delivery system transformation. These measures could also encourage providers to address health equity through service enhancements, patient engagement activities, and adoption of best practices to improve performance in this domain. Public reporting of health equity measures or domains would support monitoring of health disparities over time and help inform consumers' choice of providers.

Implementing this recommendation, however, will first require measure developers to create health equity measures. Health equity could be measured in various ways, including the difference in



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performance on particular measures between socially at-risk and other beneficiaries within a providers' population, comparing performance for socially at-risk populations across providers, or evaluating improvement in measure performance for a providers' socially at-risk population over time. One existing measure is the Health Equity Summary Score developed by CMS OMH.<sup>19</sup> The use of health equity measures in VBP programs is discussed in Recommendation 2.3.

**Recommendation 1.4: Quality and resource use measures should be reported separately for dually enrolled beneficiaries and other beneficiaries.**

This recommendation addresses Congress' requirement that the Secretary should make recommendations on how to account for social risk factors in quality and resource use measures.

This recommendation builds on the first consideration in Study A: "Consider enhancing data collection and developing statistical techniques to allow measurement and reporting of performance for beneficiaries with social risk factors on key quality and resource use measures." This Report also finds that dual enrollment is the strongest predictor of poor outcomes, and for that reason recommends stratifying reported measures by dual enrollment in quality reporting programs.

Since Study A was published, substantial progress has been made on stratified reporting of measures. Currently, CMS's Office of Minority Health (OMH) Mapping Medicare Disparities tool compares quality and resource use outcomes for dually enrolled and non-dually enrolled beneficiaries,<sup>20</sup> and CMS has begun providing hospitals with confidential reports of pneumonia readmission rates for dually enrolled compared to other beneficiaries.<sup>21</sup> These efforts could be expanded either by including additional measures or providers on OMH's Mapping Medicare Disparities tool or by adding stratified measures to CMS's compare websites (Hospital Compare, Nursing Home Compare, Home Health Compare, Dialysis Facility Compare, Long-Term Care Hospital Compare, Inpatient Rehabilitation Facility Compare, Physician Compare, Hospice Compare, and Medicare Plan Finder). This additional information could allow policy makers and providers to measure and track quality, outcomes, and costs for beneficiaries with social risk factors over time to reduce disparities and improve care for beneficiaries with social risk factors. However, adding stratified measures may be confusing, rather than helpful, for beneficiaries using these tools to select a provider. For that reason, it may be most appropriate to include these stratified measures on a separate data site rather than websites designed to help patients select high-quality providers.

**Recommendation 1.5: Quality and resource use measures should *not* be adjusted for social risk factors for public reporting.**

This recommendation addresses Congress' requirement that the Secretary should make recommendations on how to account for social risk factors in quality and resource use measures.

As discussed in Recommendation 1.4 above, stratified reporting is important to monitor disparities and improvements over time. However, in public reporting, it is also important to hold providers accountable for overall results, regardless of social risk. For this reason, quality and resource use measures should also be reported for a provider's overall population without adjustment for social risk.

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**Recommendation 1.6: Composite scores should *not* be adjusted for social risk factors for public reporting.**

This recommendation addresses Congress' requirement that the Secretary should make recommendations on how to account for social risk factors in quality and resource use measures.

In addition to *not* to adjusting measures for social risk in public reporting (Recommendation 1.5), composite scores, such as star ratings, should *not* be adjusted for social risk factors. Composite scores used for public reporting should *not* use measures that are adjusted for social risk factors. They should also *not* use other methods to account for social risk, such as peer grouping.

### Strategy 2: Set High, Fair Quality Standards for All Beneficiaries

This strategy aims to hold providers accountable to the same standards in VBP programs to improve care and health outcomes for all Medicare beneficiaries. It recognizes that beneficiaries with social risk factors may require more supports and resources to achieve the same outcomes. A standard, comprehensive risk-adjustment framework for all outcome and resource use measures, including functional risk factors, improves provider comparisons across measures.

**Recommendation 2.1: Measure developers and endorsement organizations should create a standard risk-adjustment framework that includes functional risk for all risk-adjusted outcome and resource use measures used in Medicare programs.**

This recommendation addresses Congress' requirements that the Secretary make recommendations on accounting for social risk in quality and resource use measures.

Measures used in VBP programs would benefit from a standard risk adjustment framework that sets a consistent policy for a number of reasons. First, the current lack of standardization across measures makes it difficult to accurately assess the role of social risk, as social risk is correlated with medical risk: both comorbidities and functional status. Thus, measures that include more medical risk adjustment are likely to see a smaller effect of social risk, making it difficult to compare and track disparities across measures and patient populations. Second, the use of different risk adjustment methods and factors make it difficult to compare performance across measures. If a provider does better on one measure than another, it may be due to differences in performance or differences in the measures' risk adjustment.

As discussed in Chapter 5, current outcome and resource use measures in Medicare's VBP programs use a variety of risk-adjustment methods and measures. These include different methods to adjust for medical risk such as comorbidities, functional risk adjustment, or reason for hospitalization (diagnosis). Some measures include social risk adjustment using the beneficiary-level risk factor of dual enrollment status. Despite the general consensus on the importance of medical risk adjustment, however, many measures currently used do not include functional risk adjustment. To fully account for differences in health status

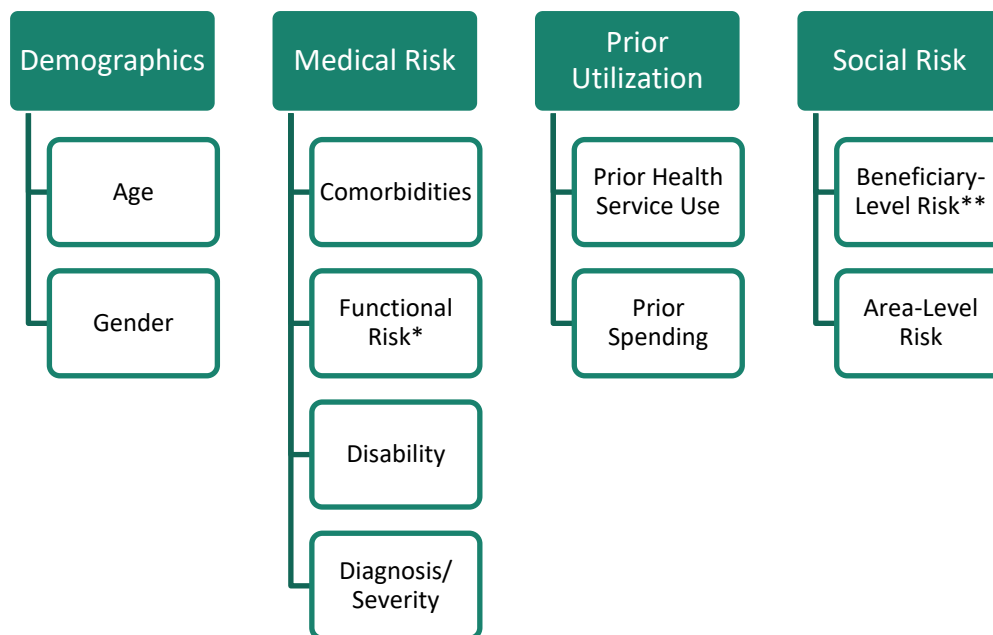
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between beneficiaries, it is important for measure developers to follow a consistent policy across measures and to account for functional risk factors in *all* outcome and resource use measures' risk adjustment. One possible approach to account for functional risk factors using ICD codes is presented in this Report. Note that this recommendation does not apply to measures that do not use risk adjustment, such as process measures where the same process is expected for all beneficiaries.

Figure 1.4. illustrates the different factors that can potentially be used in risk adjustment and that should be considered for a standard risk-adjustment framework. Social risk factors are depicted in the figure's right column, but are not recommended to be included in the risk-adjustment of process or outcome measures. Demographics and medical risk adjustment are widely accepted as appropriate and important risk-adjustment factors. Some measures include prior utilization, but not all. Almost no measures at this time include social risk, except patient experience of care survey measures. Social risk factors are *not* recommended for the standard, clinical risk-adjustment model. Recommendations 2.3-2.5 discuss the appropriateness of adjusting for social risk by type of measure.

As discussed in more detail in this Report's introductory chapters, the appropriate risk-adjustment approach may depend on the planned use of the measure (i.e., public health surveillance, population health management, quality improvement, quality reporting, VBP, or program evaluation). The standard risk-adjustment framework as suggested by this recommendation may need to specify different risk-adjustment methods for different uses (i.e., standardized age/gender adjusted outcomes for population health management, clinically risk-adjusted quality measures stratified by patient subgroups for quality reporting, etc.).

**Figure 1.4. Potential Risk-Adjustment Variables**



\*This Report includes the recommendation to include functional risk in the standard risk adjustment framework.

\*\*This Report includes the recommendations to adjust resource use and patient experience measures for dual enrollment status as a beneficiary-level social risk factor, but *not* to adjust quality process or outcome measures for social risk.

Note: This Report does not include specific recommendations for other potential risk adjustment variables.

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**Recommendation 2.2: Value-based purchasing programs should include health equity measures and/or domains.**

This recommendation addresses Congress' requirements that the Secretary make recommendations on accounting for social risk in quality and resource use measures and in determining payment adjustments based on these measures.

This recommendation is similar to recommendation 1.3, but focuses on the use of health equity measures in VBP programs rather than quality reporting programs. Currently, no VBP programs explicitly include health equity measures that provide incentives to reduce health disparities, although the Merit-based Incentive Payment System (MIPS) program does include some optional health equity activities in the improvement activities performance category. As with public reporting of health equity measures, including health equity measures in VBP programs can help providers prioritize areas for particular focus, help providers focus on reducing disparities, and signal that health equity is an important component of delivery system transformation. Once health equity measures are developed for public reporting, they can be included in existing VBP programs as allowed by statute.

**Recommendation 2.3: Resource use and patient experience measures should adjust for social risk factors in VBP programs.**

This recommendation addresses Congress' requirements that the Secretary make recommendations on accounting for social risk in quality and resource use measures.

**1. A framework for considering social risk adjustment by type of measure**

As discussed above in Recommendation 2.1, measures used in VBP programs would benefit from a standard risk adjustment framework that sets a consistent policy. Policies could be established across all types of measures or separately for each type (process, outcome, patient experience, and resource use).

One solution that has been advocated for accounting for social risk in Medicare's VBP programs is adding social risk factors to all measures' risk adjustment to "level the playing field." The appeal of this approach is that it recognizes the greater challenges that may be faced in achieving the same outcomes for beneficiaries with social risk factors and may reduce the likelihood that concerns about performance could worsen access to care for these groups. Such considerations are particularly appropriate in situations in which measure performance is closely tied to social risk, and the consequences of this risk on outcomes are truly beyond providers' control, making the benefits of adjustment outweigh the drawbacks. In this case, it would still be important for VBP programs to include incentives for providing high-quality care for socially at-risk beneficiaries in other ways, such as including health equity measures or domains as discussed in Strategy 1 above.

Alternatively, risk-adjustment policies could be developed by type of measure, in conjunction with a set of criteria on the appropriateness of risk-adjustment.

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As described in Chapter 5, measures are *less* appropriate for social risk adjustment if:

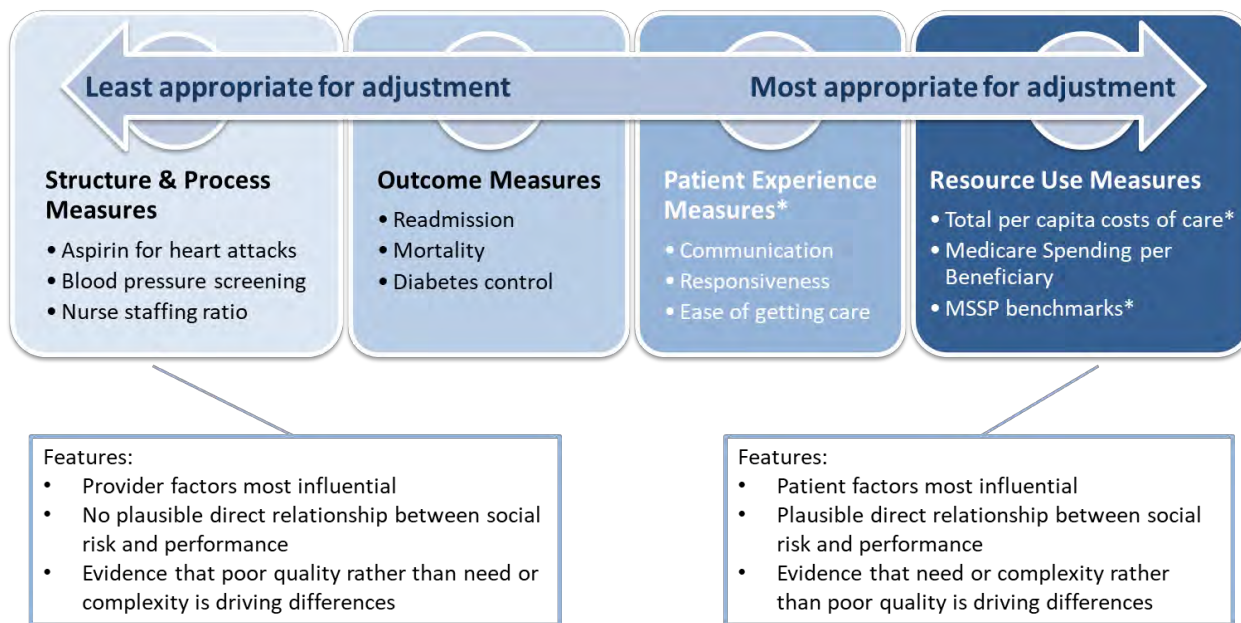
1. They are predominantly under the control of the provider,
2. There is no plausible direct relationship between the social risk factor and the outcome, and
3. There is evidence that provider bias, rather than patient need or complexity, is driving differences in performance.

Measures are *more* appropriate for social risk adjustment if the differences in outcomes or utilization are:

1. Predominantly related to patient factors,
2. If there is a plausible direct relationship between the social risk factor and the outcome, and
3. If there is evidence that patient need or complexity, rather than provider performance, is driving differences in performance.

Given that the role of social risk varies by type of measure, the appropriateness of adjusting measures for social risk may be better considered along a continuum, as shown in Figure 1.5.

**Figure 1.5. Considerations for Adjusting Quality and Resource Use Measures for Social Risk by Measure Type**



\*=measure currently adjusted for social risk factor(s)

Note: MSSP=Medicare Shared Savings Program.

## 2. Adjust resource use measures for social risk to recognize more resources may be needed to achieve same outcomes

To account for the fact that it may require additional resources to achieve the same high quality care for socially at-risk beneficiaries, *all* resource use measures should adjust for social risk. In order to provide a consistent governing principle, all resource use measures should adjust for social risk. Some current

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resource use measures adjust for social risk, including the MIPS total per capita cost measure, which adjusts for the HCC (hierarchical condition category) risk score that in turn includes dual-enrollment status. Others, such as the Medicare Spending per Beneficiary measure, do not adjust for dual-enrollment status, even though the analyses in this Report find that dually enrolled beneficiaries have higher episode spending driven primarily by greater use of institutional and community-based post-acute care to meet their greater medical and social needs.

To provide consumers with information on the care that they should expect to receive, however, measures should *not* be adjusted for social risk in public reporting programs, but instead reported for dually enrolled beneficiaries and other beneficiaries separately as described in Recommendation 1.4.

### 3. Adjust patient experience measures for social risk to account for response tendencies

Patient experience measures, such as those collected by the CMS Consumer Assessment of Healthcare Providers and Systems (CAHPS) surveys, are currently adjusted for social risk using factors such as education, dual enrollment, and language.<sup>22</sup> These adjustments seek to account for differences in response tendencies associated with social risk factors, rather than differences in the quality of care provided.<sup>23,24</sup> For example, individuals with less education and those who report better general and mental health provide more positive ratings and reports of care than others in the same health insurer contracts.<sup>22</sup> In order to accurately assess the care provided and compare patients' experiences, these measures should continue to adjust for social risk factors.

**Recommendation 2.4: Process and outcome measures should *not* be adjusted for social risk in value-based purchasing programs.**

This recommendation addresses Congress' requirements that the Secretary make recommendations on accounting for social risk in quality and resource use measures.

Although Recommendation 2.3 recommends risk adjusting patient experience and resource use measures for social risk, for other types of measures, the drawbacks of adjusting for social risk are considerable for both process and outcome measures.

#### 1. Process measures should *not* be adjusted for social risk

First, there are many quality measures for which there is no plausible role for any type of risk adjustment. Pure process measures such as giving aspirin for a heart attack, for example, are primarily under providers' control, and should be done regardless of a beneficiary's social risk profile. Second, adjusting the process of care quality measures risks masking disparities, potentially reducing the long-term ability to identify and reduce them. Third, adjusting quality measures may have a negative impact on transparency for consumers. Finally, to the degree that differences in measures reflect actual differences in provider performance, adjusting the measures directly could excuse the delivery of differential care to beneficiaries with social risk factors. For these reasons, process measures should *not* be adjusted for social risk factors.



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**2. Outcome measures should *not* be adjusted for social risk**

In terms of appropriateness for adjusting for social risk, outcome measures fall in the middle of the spectrum shown in Figure 1.5 above. For many outcome measures, the provider has some control in the care given in the care setting, but outcomes are assessed at some point after the health care encounter. With 30-day readmissions, for example, providers can improve outcomes for socially at-risk beneficiaries through discharge planning, follow-up care, referrals for social services, and building relationships with community-based organizations. To hold all providers accountable to the same, high standards for all beneficiaries, therefore outcome measures should *not* be adjusted for social risk.

Because achieving the same high-quality outcomes may be more difficult for socially at-risk beneficiaries than for other beneficiaries, it is important to assist providers in achieving these high-quality outcomes for all beneficiaries. Rather than risk adjusting outcome measures for social risk to avoid VBP payment adjustments for worse outcomes for socially at-risk beneficiaries, programs should provide support in other ways. This could include additional payments or bonuses to safety-net providers. Although they are for different purposes, there are already existing payments and bonuses that target safety-net providers, including the current DSH payments and the bonus points for small practices and practices with a higher share of medically and socially complex patients in the MIPS program. It could also include sharing best practices. Both of these recommendations are discussed in Strategy 3 below. To provide consumers with information on the care that they should expect to receive, moreover, measures should also *not* be adjusted for social risk in public reporting programs, but instead reported for dually enrolled beneficiaries and other beneficiaries separately as described in Recommendation 1.4.

**Recommendation 2.5: Value-based purchasing programs should *not* use peer grouping or categorical adjustments for social risk factors. Where these adjustments are currently in place, they should be removed when additional actions and tools are implemented to help providers achieve high-quality care for all beneficiaries.**

This recommendation addresses Congress' requirements that the Secretary make recommendations on determining payment adjustments in VBP programs.

In addition to *not* adjusting process or outcome measures (Recommendation 2.4), VBP performance scores should *not* be adjusted for social risk factors. This recommendation applies to using peer grouping to assign VBP payment adjustments, such as in the HRRP, and other methods like the CAI used in the MA Star Ratings program. Similar to the arguments against adjusting quality measures for social risk presented in Recommendation 2.4 above, peer grouping establishes different quality standards across providers. Under peer grouping, providers who serve more socially at-risk beneficiaries may avoid negative payment adjustments, even though they may have lower scores compared to providers with fewer socially at-risk beneficiaries. Instead, safety-net providers should have additional tools and resources to help them achieve high-quality outcomes for all beneficiaries, as discussed in Strategy 3 below. These additional tools and resources should be available for all providers that treat a large proportion of socially at-risk beneficiaries, regardless of their performance on specific measures or programs. For example, peer grouping compares performance across similar providers rather than all providers, but is still dependent

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on an individual provider's performance. Bonus points in a VBP program, on the other hand, provide additional resources to all safety net providers, regardless of their performance. For that reason, bonus points in VBP programs are appropriate as additional tools and resources, while peer grouping or the CAI are not. Once these additional actions, tools, and resources are available, approaches such as peer grouping or the CAI should be removed from VBP programs.

#### Strategy 3: Reward and Support Better Outcomes for Beneficiaries with Social Risk Factors

This strategy recognizes that providing additional supports and resources is foundational to address beneficiaries' social risk in order to improve care and outcomes. Such additional supports may include sharing best practices through learning networks and encouraging medical providers to build links with social service providers. Additional resources to meet beneficiaries' social needs may be made available through alternative payment models, supplemental benefits that address social needs, or additional payments. Targeted payments to support providers' efforts to address social risk factors may also be made through VBP incentive payments.

**Recommendation 3.1: CMS should continue to support providers and plans addressing social risk factors through models, supplemental benefits, and VBP payment adjustments. HHS should continue to develop approaches to address beneficiaries' social needs. Additional research is needed on best practices for providing care to socially at-risk beneficiaries. Best practices, once identified, need to be scaled.**

This recommendation addresses Congress' requirement that the Secretary should make recommendations on how to account for social risk factors in determining payment adjustments based on quality and resource use measures.

It is clear that simply adjusting measures does not fully address the tough, real problems underlying the pervasive differences in performance across measures and programs that were examined in this Report. Social risk factors are powerful, and to truly begin to "solve" the problem by making things better for beneficiaries with social risk factors and the providers who serve them, these factors need to be explicitly recognized and addressed. This recommendation to support providers and plans addressing social risk factors goes hand-in-hand with Recommendations 2.3-2.5 focusing on risk adjustment and other methods for accounting for social risk in Medicare's VBP programs. This Report recommends adjusting resource use and patient experience, but *not* process or outcome measures, for social risk. However, achieving the same high-quality outcomes may be more difficult for socially at-risk beneficiaries than for other beneficiaries. It is important to assist providers in achieving these high-quality outcomes for all beneficiaries with the resources (through models, supplemental benefits, and VBP payment adjustments) and tools (such as best practices) to achieve these outcomes.

Currently, Medicare provides payment adjustments for providers treating socially at-risk beneficiaries in some settings but not others (see table in the appendix to this chapter). Specifically, Medicare provides

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DSH payments to hospitals treating a large proportion of dually enrolled beneficiaries as required by Congress, and has used administrative authority to provide bonus points for practices with a higher proportion of socially complex patients in the MIPS program. Although the recommendation that outcome measures should *not* be adjusted for social risk encourages providers to achieve the same high-quality outcomes for socially at-risk beneficiaries as their other patients, it is important to recognize that achieving these outcomes may require more resources for socially at-risk beneficiaries. Without additional payment adjustments, providers have reported that they may be disincentivized to treat socially at-risk beneficiaries, jeopardizing access to care.

CMS should also support providers and plans working to address beneficiaries' social needs through supplemental benefits. New flexibilities in the Medicare Advantage (MA) program will allow health plans to provide supplemental benefits that are not necessarily health-related but have a reasonable expectation of improving or maintaining the health or overall function (including benefits that secondarily address social risk factors), but these benefits are only available to beneficiaries with chronic conditions enrolled in MA plans.<sup>6</sup> Although a small percentage of plans are offering these new supplemental benefits in the first year available, interviews with MA plans before these new flexibilities were implemented found that plans were considering a variety of approaches, including screening beneficiaries for social needs and referring to community organizations to address those needs ("screen and refer"), and screening for social needs and directly providing services to address the needs identified ("screen and provide").<sup>25,26</sup> As these flexibilities are implemented, it will be important for MA plans and others to evaluate the extent to which any supplemental benefits address Medicare beneficiaries' social needs and impact quality and resource use measures.

Finally, knowledge about best practices to address beneficiaries' social risk is an important tool for achieving high quality outcomes for all beneficiaries. As evidenced by the responses to ASPE's RFI, providers and health plans are already implementing numerous interventions to address beneficiaries' social risks. Within HHS, a number of agencies including CMS, the Administration for Community Living (ACL), the Substance Abuse and Mental Health Services Administration (SAMHSA), and the Administration for Children and Families (ACF), work to address social risk factors. States in the Medicaid program are also taking various steps to address beneficiaries' social needs. However, the evaluations of these approaches are not yet mature, making it difficult for organizations wanting to adopt new interventions to choose effective approaches. HHS, through CMS's Innovation Center, has begun to develop and evaluate new models to address social risk and should continue to do so. For example, the current Accountable Health Communities model and evaluation will help to build the knowledge base about effective interventions, along with findings from evaluations of state models.<sup>27,28</sup> Additional models including incentive payments or alternative payment structures to address beneficiaries' social needs

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<sup>6</sup> The Bipartisan Budget Act of 2018 (Public Law No. 115-123) amended section 1852(a) of the Social Security Act to expand the types of supplemental benefits that may be offered by MA plans to chronically ill enrollees. These include supplemental benefits that are not primarily health related and may be offered non-uniformly to eligible chronically ill enrollees.

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should be developed under various authorities to allow best practices to be identified, tested, disseminated broadly, and scaled.

**Recommendation 3.2: Learning networks, such as Quality Improvement Organizations (QIOs), should share best practices across providers.**

This recommendation addresses the policy question of how the federal government can facilitate the ability of health plans, providers, and communities to address social risk factors and integrate health and social services.

This recommendation to share best practices across providers goes hand-in-hand with Recommendations 2.3-2.5 focusing on risk adjustment and other methods for accounting for social risk in Medicare's VBP programs. This Report recommends adjusting resource use and patient experience measures, but *not* process or outcome measures, for social risk. However, achieving the same high-quality outcomes may be more difficult for socially at-risk beneficiaries than for other beneficiaries. It is important to assist providers in achieving these high-quality outcomes for all beneficiaries with resources and tools, such as best practices, to achieve these outcomes.

As more interventions are evaluated and the evidence of the effectiveness of different approaches grows, it is important to share this knowledge across the health care system. Currently, Quality Innovation Network Quality Improvement Organizations (QIN-QIOs) have an opportunity to identify and disseminate effective practices across providers.<sup>29</sup>

**Recommendation 3.3: HHS should encourage medical providers and plans to build links with social service providers to better address beneficiaries' social needs.**

This recommendation addresses the policy question of how the federal government can facilitate the ability of health plans, providers, and communities to address social risk factors and integrate health and social services.

VBP programs provide incentives for medical providers and plans to build relationships with social service providers. Current chronic-care management services, paid for by Medicare in addition to office visits, include coordinating community and social services for beneficiaries with multiple chronic conditions.<sup>30</sup> Nonetheless, one of the common themes in the submitted responses to ASPE's RFI was the difficulty of coordinating social and medical services. Although non-profit hospitals are currently required to conduct community-needs assessments and provide community benefits, there is much more than can be done.<sup>31</sup> Health care providers can screen for social needs and refer beneficiaries to organizations that can address those needs. However, many RFI respondents brought up challenges to this "screen and refer" approach. These included challenges in maintaining an up-to-date directory of social service providers, understanding eligibility criteria for different services, "closing the loop" after a referral is made to find out whether services were actually received, and the capacity of social services to meet beneficiaries' needs. Some providers and plans are going beyond "screen and refer" to "screen and provide" by providing services, such as food or housing, in concert with community organizations.

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Better coordination between medical and social service providers could reduce these challenges. Specifically, HHS could encourage more community relationships through some of the recommendations above, such as developing data collection/interoperability standards, developing and testing new models for addressing social risk, and working with providers to evaluate and disseminate best practices for addressing the social needs of beneficiaries through home and community based services and social supports.

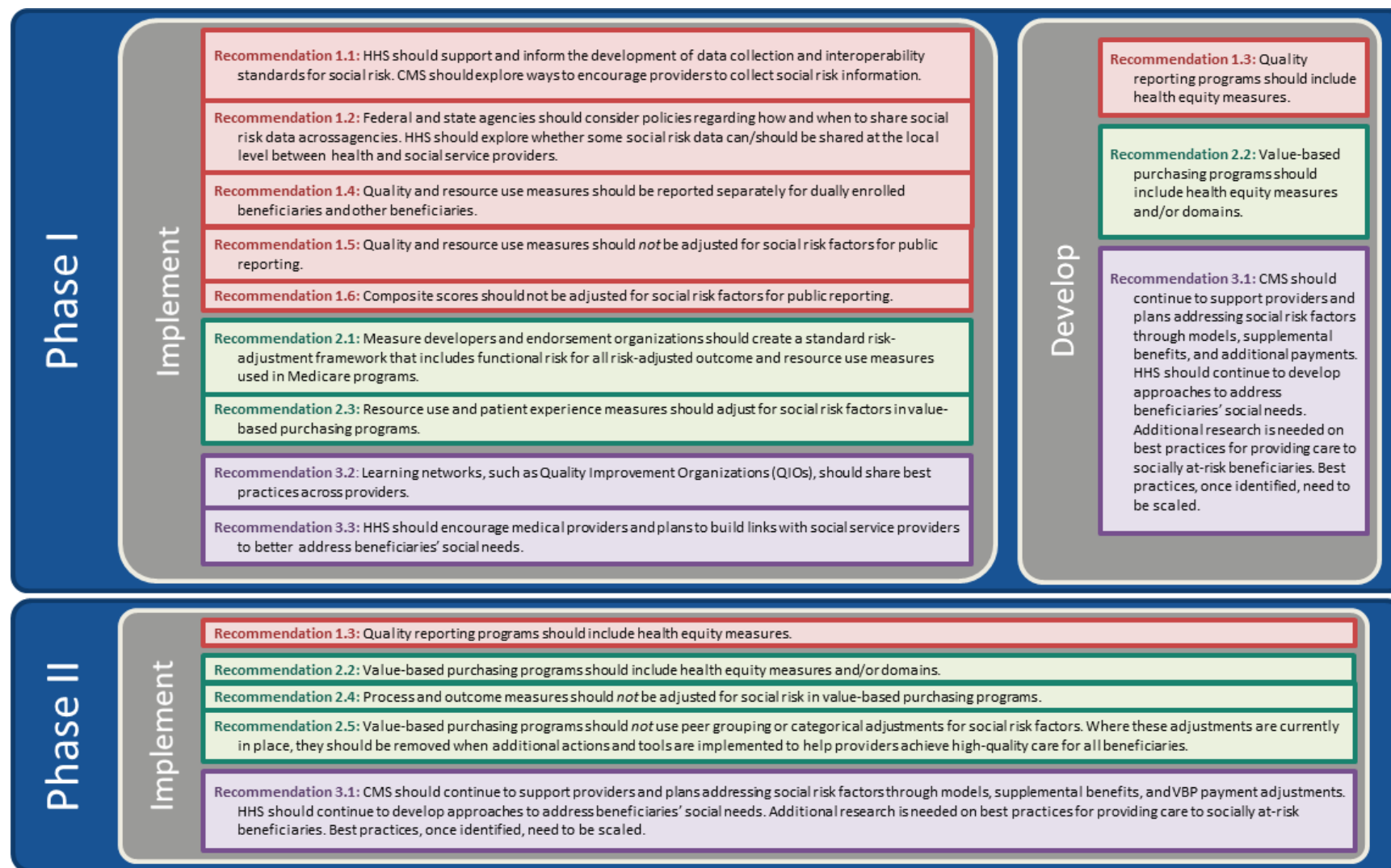
### C. Summary of Recommendations

The comprehensive approach to addressing social risk in Medicare's VBP programs introduced above can be implemented in phases depending on the amount of development needed for each recommendation, as discussed earlier. Some recommendations can be implemented alone, while others should be implemented together to achieve the policy goals. For instance, implementing Recommendation 2.5 by removing peer grouping from the Hospital Readmissions Reduction Program (HRRP) and the CAI from the Medicare Advantage Star Ratings needs to be implemented along with additional actions and tools to help providers achieve high quality outcomes for all beneficiaries, such as adjustments to supplemental benefits and additional adjustments in payments to providers (Recommendation 3.1), a standard risk adjustment framework that includes functional risk adjustment (Recommendation 2.1), or including health equity measures or domains in VBP programs (Recommendation 1.3).

For these reasons, the recommendations included in this Report may be implemented in two phases. Potential timing for implementing each recommendation is shown in Figure 1.6.

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Figure 1.6. Implementation Phases for Recommendations





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In particular, Recommendations 1.5, 1.6, 2.3, 2.4, and 2.5 address how to account for social risk in measures and programs, including both VBP programs and quality reporting programs.

**Table 1.1. Recommendations: Whether to Adjust for Social Risk Factors by Type of Measure and Program**

Measure Type	Whether to Adjust for Social Risk Factors	
	Quality Reporting Programs	VBP Programs
Process Measures	No	No
Outcome Measures	No	No
Patient Experience Measures	Yes	Yes
Resource Use Measures	No	Yes
Program Performance Scores	No	No

Note: VBP=value-based purchasing.

“No” indicates a recommendation *not* to adjust for social risk factors.

“Yes” indicates a recommendation to adjust for social risk factors.

## IV. Next Steps

This Report’s analysis and recommendations address the policy questions put forth in the IMPACT Act. However, they also raise additional questions and propose new policies that should be evaluated for their effectiveness of achieving the intended results and potential unintended consequences.

### A. Measure and Report Quality for Beneficiaries with Social Risk Factors

The findings about the current state of data collection for social risk factors suggest some changes that could improve social risk data collection and use to improve health outcomes. First, social risk measures and data collection tools could be standardized across federal, state, and local programs. Additionally, within the health care system, social risk factors could be mapped to electronic health record (EHR) fields and/or diagnosis codes. Existing EHR fields and diagnosis codes could also be expanded to include additional social risk factors and more information about beneficiaries’ social needs. Much work is already being done to improve social risk data collection, but these are typically private efforts and many groups are working in the same area. As these efforts mature, it may be appropriate for the Department to set data collection standards and common data elements for social risk factors so that data can be collected in a systematic way and easily shared. Once this information is available, tracking progress in improving outcomes for socially at-risk beneficiaries will be important.

### B. Set High, Fair Quality Standards for All Beneficiaries

These illustrate the difficulty of assessing the role of risk factors across measures, particularly when risk-adjustment approaches differ so much between the various quality and resource use measures included in Medicare’s nine VBP programs. A standard risk-adjustment approach that could be used across measures and programs, and modified as necessary and appropriate, would help to address this issue.

This Report does not specify exactly which factors should be included in such a standard risk-adjustment approach, but the findings about the medical and social risk factors evaluated provide some insights.

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Including functional risk adjustment would likely improve current medical risk adjustments that currently only use comorbidities. Including functional risk factors would also allow social risk to be assessed more accurately because some of the effect currently attributed to social risk may actually be due to functional risk. Additional analyses to determine which functional risk factors should be included is still needed.

In terms of including social risk factors in the standard risk-adjustment approach, this Report's findings suggest that including dual-enrollment status makes only small average differences in program impacts between safety-net or high-dual providers and other providers. In terms of additional sources of social risk information (beyond Medicare data), the findings suggest that dual-enrollment status is a good proxy for social risk, and adding any of the additional measures of social risk evaluated (including other Medicare or survey data) would not substantially improve the measure risk adjustment beyond what is achieved by including dual-enrollment status. Note, however, that the small sample sizes of the MCBS make the findings using this survey less conclusive; results from the forthcoming analysis using the American Community Survey may be different and shed more light on these conclusions.

### C. Reward and Support Better Outcomes for Beneficiaries with Social Risk Factors

Providing high-quality care for all beneficiaries requires understanding which approaches are successful for socially at-risk beneficiaries specifically. Such understanding in turn requires rigorous evaluations of current interventions to determine what works, and sharing and promoting best practices across the health care system. Since many current interventions include referrals to social service providers, the health care system needs community resources and links to social service providers to address beneficiaries' social needs, as well as a better understanding of their efficacy. The cost of these interventions and services should also be evaluated to understand the additional resources needed to achieve high quality outcomes for socially at-risk beneficiaries.

Equally important will be tracking supplemental benefits to address social needs provided by the promising flexible state and federal policies as they are implemented, including their success in improving health outcomes for socially at-risk populations. It will also be important to understand what supplemental benefits MA plans offer with the new flexibilities for supplemental benefits authorized by the CHRONIC Care Act, as well as the extent to which any additional benefits address Medicare beneficiaries' social needs and impact quality and resource use measures. Additionally, by ensuring that the measures and programs are relevant for dually enrolled beneficiaries through reporting measures separately for dually enrolled and other beneficiaries and including health equity measures in VBP programs, Medicare's VBP programs will be better able to incentivize high-quality care for socially at-risk beneficiaries.

Beyond the specific approaches needed for socially at-risk beneficiaries, future work should evaluate the success of the move to value-based programs. Addressing social needs is only one part of moving to value-based care. As new VBP programs are adopted and existing programs mature, it will be important to understand whether these programs are achieving their objectives and avoiding unintended consequences.

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